



# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 141196

**TO: Alton Pryor**

**Location: 4a39/4c70**

**Art Unit: 1616**

**Tuesday, December 28, 2004**

**Case Serial Number: 09/764829**

**From: Noble Jarrell**

**Location: Biotech-Chem Library**

**Rem 1B71**

**Phone: 272-2556**

**Noble.jarrell@uspto.gov**

Search Notes

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 12/22/04  
 Art Unit: 1616 Phone Number 202-70621 Serial Number: 09/764,829  
 Mail Box and Bldg/Room Location: 4A39 Results Format Preferred (circle): PAPER DISK E-MAIL  
RF M

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Search Composition comprising:

- ① Aluminium or Aluminium compound or Zirconium or Zirconium compound
- ② diethylenetriamine pentaacetic acid (DTPA)  
 (or) triethylene tetraamine hexaacetic acid  
 (TTHA), diethylenetriamine penta(methylphosphonic acid) (DTPMP)  
 (or) ethanehydroxydiphosphonic acid (EHDP)  
 (or) ethylenediaminetetra(methylene phosphonic acid) (EDTMP)  
 (or) ethylenediaminetetra(methylene-hexamethylene diaminetetra(methylene phosphonic acid)  
 (or) ethylenediamine disuccinic acid (EDDS)  
 (or) ethylene bis [2-(2-hydroxy-phenyl) glyline] (EDDHA)
- ③ Combine ① + ②

## STAFF USE ONLY

Searcher: Anable

Type of Search

Vendors and cost where applicable

Searcher Phone #: \_\_\_\_\_

NA Sequence (#) \_\_\_\_\_

STN \_\_\_\_\_

864

Searcher Location: \_\_\_\_\_

AA Sequence (#) \_\_\_\_\_

Dialog \_\_\_\_\_

Date Searcher Picked Up: \_\_\_\_\_

Structure (#) \_\_\_\_\_

Questel/Orbit \_\_\_\_\_

Date Compiled: 12/28/04

Bibliographic \_\_\_\_\_

Dr. Link \_\_\_\_\_

Searcher Prep. Review Time: 20

Litigation \_\_\_\_\_

Lexis/Nexis \_\_\_\_\_

Clerical Prep. time: \_\_\_\_\_

FullText \_\_\_\_\_

Sequence Systems \_\_\_\_\_

Online Time: 60

Other \_\_\_\_\_

Other (specify) \_\_\_\_\_

=> d his

(FILE 'HOME' ENTERED AT 09:15:38 ON 28 DEC 2004)

FILE 'HCAPLUS' ENTERED AT 09:15:50 ON 28 DEC 2004

L1 1 US20010046479/PN  
E UK2000-1130/AP, PRN  
E GB2000-1130/AP, PRN  
L2 1 GB2000-1130/AP, PRN  
E GB2000-1131/AP, PRN  
L3 1 GB2000-1131/AP, PRN  
L4 1 L1-3

FILE 'REGISTRY' ENTERED AT 09:17:37 ON 28 DEC 2004

FILE 'HCAPLUS' ENTERED AT 09:17:40 ON 28 DEC 2004  
L5 TRA L4 1- RN : 8 TERMS

FILE 'REGISTRY' ENTERED AT 09:17:40 ON 28 DEC 2004  
L6 8 SEA L5

FILE 'WPIX' ENTERED AT 09:17:44 ON 28 DEC 2004

L7 1 US20010046479/PN  
E GB2000-1130/AP, PRN  
L8 1 GB2000-1130/AP, PRN  
L9 1 GB2000-1131/AP, PRN  
L10 1 L7-9

=> b hcap

FILE 'HCAPLUS' ENTERED AT 09:18:41 ON 28 DEC 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 28 Dec 2004 VOL 142 ISS 1  
FILE LAST UPDATED: 24 Dec 2004 (20041224/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all 14

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:545447 HCAPLUS  
DN 135:111741  
ED Entered STN: 27 Jul 2001  
TI Antimicrobial deodorant containing transition metal chelators and antiperspirant actives  
IN Landa, Andrew Sjaak; Makin, Stephen Anthony; McKay, Victoria Anne  
PA Unilever PLC, UK; Unilever NV; Hindustan Lever Limited  
SO PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM A61K007-32  
ICS A61K007-38  
CC 62-4 (Essential Oils and Cosmetics)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001052804	A1	20010726	WO 2001-EP111	20010108 <--
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,			

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,  
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 CA 2396959 AA 20010726 CA 2001-2396959 20010108 <--  
 BR 2001007689 A 20021119 BR 2001-7689 20010108 <--  
 EP 1259215 A1 20021127 EP 2001-942542 20010108 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 AU 772448 B2 20040429 AU 2001-28457 20010108 <--  
 US 2001046479 A1 20011129 US 2001-764829 20010117 <--  
 ZA 2002005100 A 20030904 ZA 2002-5100 20020625 <--  
 PRAI GB 2000-1130 A 20000118 <--  
 GB 2000-1131 A 20000118 <--  
 WO 2001-EP111 W 20010108

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2001052804	ICM	A61K007-32
	ICS	A61K007-38
US 2001046479	ECLA	A61K007/32; A61K007/32M
AB	Disclosed are antimicrobial products comprising an antiperspirant active and an amount of transition metal chelator sufficient to enhance the deodorancy performance of said antiperspirant active. The transition metal chelator salt improves the antimicrobial performance of the antiperspirant active and the two components can be co-formulated. Particular products are antiperspirant deodorant compns. Preferred chelator salts have high affinity for iron (III). A stick deodorant antiperspirant contained AZAG 25, talc 3.2, stearyl alc. 14, hydrogenated castor oil 4, PEG-8 distearate 1, DTPA 1, poly(hexamethylene biguanide) stearate 0.215, and volatile silicone DC 245 q.s. to 100 %.	
ST	antiperspirant aluminum zirconium DTPA chelator deodorant	
IT	Antiperspirants	
	Chelating agents	
	Deodorants (personal)	
	(antimicrobial deodorant containing transition metal chelators and antiperspirant actives)	
IT	Transition metals, biological studies	
	RL: BSU (Biological study, unclassified); BIOL (Biological study)	
	(antimicrobial deodorant containing transition metal chelators and antiperspirant actives)	
IT	Deodorants (personal)	
	(sprays; antimicrobial deodorant containing transition metal chelators and antiperspirant actives)	
IT	Deodorants (personal)	
	(sticks; antimicrobial deodorant containing transition metal chelators and antiperspirant actives)	
IT	20074-52-6, Ferric ion, biological studies	
	RL: BSU (Biological study, unclassified); BIOL (Biological study)	
	(antimicrobial deodorant containing transition metal chelators and antiperspirant actives)	
IT	67-43-6, DTPA 869-52-3, TTHA 1327-41-9, Aluminum chlorohydrate 3380-34-5, Triclosan 4602-84-0, Farnesol 190606-35-0, AZAG 217631-98-6	
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)	
	(antimicrobial deodorant containing transition metal chelators and antiperspirant actives)	

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Colgate Palmolive Co; WO 9843604 A 1998 HCPLUS
- (2) Motley, C; US 5516511 A 1996 HCPLUS
- (3) Motley, C; US 5849276 A 1998 HCPLUS
- (4) Procter & Gamble; EP 0483426 A 1992 HCPLUS
- (5) Procter & Gamble; WO 9956717 A 1999 HCPLUS
- (6) Sane, J; US 5705171 A 1998
- (7) Sane, J; US 5725846 A 1998 HCPLUS
- (8) Sane, J; US 5939055 A 1999 HCPLUS

=> b reg

FILE 'REGISTRY' ENTERED AT 09:18:48 ON 28 DEC 2004  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 DEC 2004 HIGHEST RN 802853-20-9  
 DICTIONARY FILE UPDATES: 26 DEC 2004 HIGHEST RN 802853-20-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

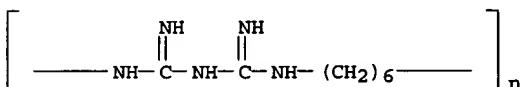
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d ide 16.tot

L6 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 217631-98-6 REGISTRY  
 CN Octadecanoic acid, compd. with poly(iminocarbonimidoyliminocarbonimidoylimino-1,6-hexanediyiyl) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Poly(iminocarbonimidoyliminocarbonimidoylimino-1,6-hexanediyiyl), octadecanoate (9CI)  
 MF C18 H36 O2 . x (C8 H17 N5)n  
 PCT Polyether, Polyether only  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL  
 DT.CA CAplus document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)

CM 1

CRN 28757-47-3  
 CMF (C8 H17 N5)n  
 CCI PMS



CM 2

CRN 57-11-4  
 CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

4 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 190606-35-0 REGISTRY  
 CN AZAG (9CI) (CA INDEX NAME)  
 ENTE An antiperspirant  
 MF Unspecified  
 CI MAN  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL  
 DT.CA CAplus document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); PROC (Process); USES

(Uses)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 10 REFERENCES IN FILE CA (1907 TO DATE)  
 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 20074-52-6 REGISTRY  
 CN Iron, ion (Fe3+) (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Fe3+  
 CN Ferric cation  
 CN Ferric ion  
 CN Iron (Fe3+)  
 CN Iron ion(3+)  
 CN Iron trivalent ion  
 CN Iron(3+)  
 CN Iron(3+) ion  
 CN Iron(III) cation  
 CN Iron(III) ion  
 MF Fe  
 LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CHEMINFORMRX, CIN, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, NIOSHTIC, PIRA, PROMT, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU  
 (\*File contains numerically searchable property data)  
 DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Preprint; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Fe3+

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10167 REFERENCES IN FILE CA (1907 TO DATE)  
 653 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 10190 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 4602-84-0 REGISTRY  
 CN 2,6,10-Dodecatrien-1-ol, 3,7,11-trimethyl- (8CI, 9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Farnesol (6CI)  
 OTHER NAMES:  
 CN 3,7,11-Trimethyl-2,6,10-dodecatrien-1-ol  
 CN Farnesyl alcohol  
 CN FCI 119a  
 CN Nikkosome  
 CN NSC 60597  
 FS 3D CONCORD  
 MF C15 H26 O  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, NAPRALERT, PROMT, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

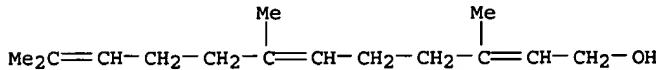
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties)



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1755 REFERENCES IN FILE CA (1907 TO DATE)

53 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1764 REFERENCES IN FILE CAPLUS (1907 TO DATE)

17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN

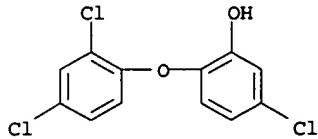
RN 3380-34-5 REGISTRY

CN Phenol, 5-chloro-2-(2,4-dichlorophenoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)

## OTHER NAMES:

CN 2',4',4-Trichloro-2-hydroxydiphenyl ether  
 CN 2',4,4'-Trichloro-2-hydroxydiphenyl ether  
 CN 2'-Hydroxy-2,4,4'-trichlorodiphenyl ether  
 CN 2,2'-Oxybis(1',5'-dichlorophenyl-5-chlorophenol)  
 CN 2,4,4'-Trichloro-2'-hydroxydiphenyl ether  
 CN 2-Hydroxy-2',4,4'-trichlorodiphenyl ether  
 CN 3-Chloro-6-(2,4-dichlorophenoxy)phenol  
 CN 4-Chloro-2-hydroxyphenyl 2,4-dichlorophenyl ether  
 CN 5-Chloro-2-(2,4-dichlorophenoxy)phenol  
 CN Aquasept  
 CN Bacti-Stat soap  
 CN Cansan TCH  
 CN CH 3565  
 CN CH 3635  
 CN DP 300  
 CN Gamophen  
 CN Irgacare MP  
 CN Irgacide LP 10  
 CN Irgaguard B 1000  
 CN Irgasan  
 CN Irgasan CH 3565  
 CN Irgasan DP 30  
 CN Irgasan DP 300  
 CN Irgasan DP 3000  
 CN Irgasan DP 400  
 CN Irgasan PE 30  
 CN Irgasan PG 60  
 CN Microban Additive B  
 CN Microban B  
 CN NM 100  
 CN Oletron  
 CN Sanitized XTX  
 CN Sapoderm  
 CN SterZac  
 CN TCCP  
 CN THDP  
 CN Tinosan AM 100  
 CN Tinosan AM 110  
 CN Triclosan  
 CN Ultra Fresh NM 100

CN Vinyzene DP 7000  
 CN Yujixin  
 CN Zilesan UW  
 FS 3D CONCORD  
 DR 164325-69-3, 112099-35-1, 88032-08-0, 261921-78-2  
 MF C12 H7 Cl3 O2  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSChem, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IMSDRUGNEWS, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, PRMT, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Cplus document type: Conference; Dissertation; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2131 REFERENCES IN FILE CA (1907 TO DATE)  
 42 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 2137 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 1327-41-9 REGISTRY  
 CN Aluminum chloride, basic (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Aluminum chloride hydroxide (8CI)  
 OTHER NAMES:  
 CN A 296  
 CN ACH 325  
 CN ACH 331  
 CN ACH 7-321  
 CN Aloxicoll  
 CN Aloxicoll LR  
 CN Aluminium hydroxychloride  
 CN Aluminol ACH  
 CN Aluminum chlorhydrate  
 CN Aluminum chlorhydroxide  
 CN Aluminum chloride hydroxide oxide, basic  
 CN Aluminum chloride oxide  
 CN Aluminum chlorhydrate  
 CN Aluminum chlorohydrol  
 CN Aluminum chlorhydroxide  
 CN Aluminum hydroxide chloride  
 CN Aluminum hydroxychloride  
 CN Aluminum oxychloride  
 CN Aquarhone  
 CN Aquarhone 18

CN Astringen  
 CN Astringen 10  
 CN Banoltan White  
 CN Basic aluminum chloride  
 CN Basic aluminum chloride, hydrate  
 CN Berukotan AC-P  
 CN Cartafix LA  
 CN Cawood 5025  
 CN Chlorhydrol  
 CN Chlorhydrol Micro-Dry  
 CN Chlorhydrol Micro-Dry SUF  
 CN E 200  
 CN E 200 (coagulant)  
 CN Ekoflock 70  
 CN Ekoflock 90  
 CN Ekoflock 91  
 CN GenPac 4370  
 CN Gilufloc 83  
 CN Hessidrex WT  
 CN HPB 5025  
 CN Hydral  
 CN Hydrofugal  
 CN Hyper Ion 1026  
 CN Hyperdrol  
 CN Kempac 10  
 CN Kempac 20  
 CN Kemwater PAX 14  
 CN Locron  
 CN Locron P

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 672263-85-3, 8012-66-6, 11097-68-0, 167140-05-8, 162535-15-1, 56803-01-1,  
 56831-66-4, 64441-77-6, 101707-17-9, 114442-10-3, 135864-70-9, 37226-46-3,  
 79586-02-0, 143230-54-0, 144388-28-3, 84861-98-3, 32056-15-8, 39380-80-8,  
 245064-40-8

MF Unspecified

CI COM, MAN

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO,  
 CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN,  
 CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,  
 MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*,  
 TOXCENTER, USAN, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Cplus document type: Conference; Dissertation; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP  
 (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
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 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological  
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 (Properties); RACT (Reactant or reagent); USES (Uses)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

3566 REFERENCES IN FILE CA (1907 TO DATE)

155 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3577 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN

RN 869-52-3 REGISTRY

CN 3,6,9,12-Tetraazatetradecanedioic acid, 3,6,9,12-tetrakis(carboxymethyl)-  
 (9CI) (CA INDEX NAME)

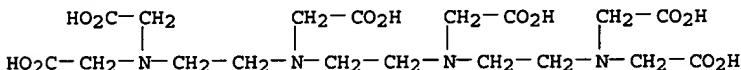
OTHER CA INDEX NAMES:

CN Acetic acid, [ethylenebis[[(carboxymethyl)imino]ethylenenitrilo]]tetra-  
 (6CI, 7CI)

CN Glycine, N,N'-ethylenebis[N-[2-[bis(carboxymethyl)amino]ethyl]- (8CI)

OTHER NAMES:

CN (Triethylenetetraamino)hexaacetic acid  
 CN Triethylenetetramine-N,N,N',N'',N''',N''''-hexaacetic acid  
 CN Triethylenetetraminehexaacetic acid  
 CN TTHA  
 CN [Ethylenebis[[(carboxymethyl)imino]ethylenenitrilo]]tetraacetic acid  
 FS 3D CONCORD  
 DR 20261-67-0  
 MF C18 H30 N4 O12  
 CI COM  
 LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
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     DETERM\*, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB, MEDLINE,  
     MSDS-OHS, NIOSHTIC, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CAplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
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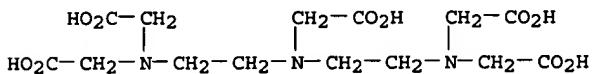


## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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 186 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 667 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 67-43-6 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
     INDEX NAME)  
 OTHER NAMES:  
 CN 1,1,4,7,7-Diethylenetriaminepentaacetic acid  
 CN 3,6,9-Triazaundecanedioic acid, 3,6,9-tris(carboxymethyl)-  
 CN Acetic acid, 2,2',2'',2'''-[(carboxymethyl)imino]bis(2,1-  
     ethanediyl)trikis-  
 CN Chel 330 acid  
 CN Chel DTPA  
 CN Clewat DA  
 CN Complexon V  
 CN Dabeersen 503  
 CN Detapac  
 CN Detarex  
 CN DETP  
 CN DETPA  
 CN Diethylenetriamine-N,N,N',N'',N''-pentaacetic acid  
 CN Diethylenetriaminepentaacetic acid  
 CN Dissolvine D  
 CN DPTA  
 CN DTPA  
 CN Hamp-Ex Acid  
 CN Monaquest CAI  
 CN N,N-Bis[2-[bis(carboxymethyl)amino]ethyl]glycine  
 CN NSC 7340  
 CN Pentacarboxymethyl diethylenetriamine  
 CN Pentetic acid

CN Titriplex V  
 CN [(Carboxymethyl)imino]bis(ethylenenitrilo)]tetraacetic acid  
 FS 3D CONCORD  
 DR 573987-64-1, 13407-13-1, 6889-50-5, 7575-40-8, 25737-54-6, 84932-15-0,  
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 MF C14 H23 N3 O10  
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 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*,  
 HODOC\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
 PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2,  
 USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
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 Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5960 REFERENCES IN FILE CA (1907 TO DATE)  
 1909 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 5965 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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FILE LAST UPDATED: 23 DEC 2004 <20041223/UP>
MOST RECENT DERWENT UPDATE: 200482 <200482/DW>
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  GUIDES, PLEASE VISIT:
  http://thomsonderwent.com/support/userguides/ <<<

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  DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
  FIRST VIEW - FILE WPIFV.
  FOR FURTHER DETAILS: <<<

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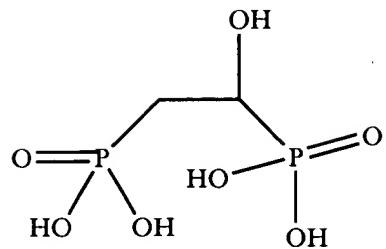
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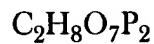
L10 ANSWER 1 OF 1 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 2001-488692 [53] WPIX  
DNC C2001-146666  
TI Anti-microbial compositions, useful as body deodorants contain  
antiperspirant and transitional metal chelator.  
DC B05 D21 E19  
IN LANDA, A S; MAKIN, S A; MCKAY, V A  
PA (UNIL) UNILEVER PLC; (LAND-I) LANDA A S; (MAKI-I) MAKIN S A; (MCKA-I)  
MCKAY V A; (HIND-N) HINDUSTAN LEVER LTD; (UNIL) UNILEVER NV  
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US 2001046479 A1 20011129 (200202) A61K007-32 <--  
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CN 1395482 A 20030205 (200334) A61K007-32  
HU 2002004294 A2 20030428 (200337) A61K007-32  
MX 2002006959 A1 20030101 (200373) A61K007-32  
ZA 2002005100 A 20031126 (200402) 53 A61K000-00  
AU 772448 B2 20040429 (200457) A61K007-32  
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20010108; US 2001046479 A1 US 2001-764829 20010117; EP 1259215 A1 EP  
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A1 WO 2001-EP111 20010108, MX 2002-6959 20020716; ZA 2002005100 A ZA  
2002-5100 20020625; AU 772448 B2 AU 2001-28457 20010108  
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2001052804; BR 2001007689 A Based on WO 2001052804; HU 2002004294 A2 Based  
on WO 2001052804; MX 2002006959 A1 Based on WO 2001052804; AU 772448 B2  
Previous Publ. AU 2001028457, Based on WO 2001052804  
PRAI GB 2000-1131 20000118; GB 2000-1130  
20000118  
IC ICM A61K000-00; A61K007-32  
ICS A61K007-38  
AB WO 200152804 A UPAB: 20010919  
NOVELTY - Anti-microbial compositions containing an antiperspirant and a  
transition metal chelator, useful as body deodorants, are new.  
DETAILED DESCRIPTION - An antimicrobial product comprises an  
antiperspirant and sufficient transitional metal chelator to enhance the  
deodorant effect of the antiperspirant.  
ACTIVITY - Antiperspirant; deodorant; anti-microbial.  
MECHANISM OF ACTION - Microbe transitional metal uptake inhibitor.  
USE - Useful as an antiperspirant, deodorant and an anti-microbial on  
the human skin.  
ADVANTAGE - The antimicrobial effect in-situ is more long-lasting  
than existing deodorants. (X) Was tested on 25 panelists' axillae and gave  
no detectable malodor after 24 hours.  
Dwg.0/0  
FS CPI  
FA AB; DCN  
MC CPI: B02-P03; B04-B01C1; B05-A01B; B05-B02C; B10-B01B; B10-E04D; B14-A01;  
B14-A02; B14-A03; B14-A04; B14-A05; B14-L06; B14-R03; D08-B09B; E02;  
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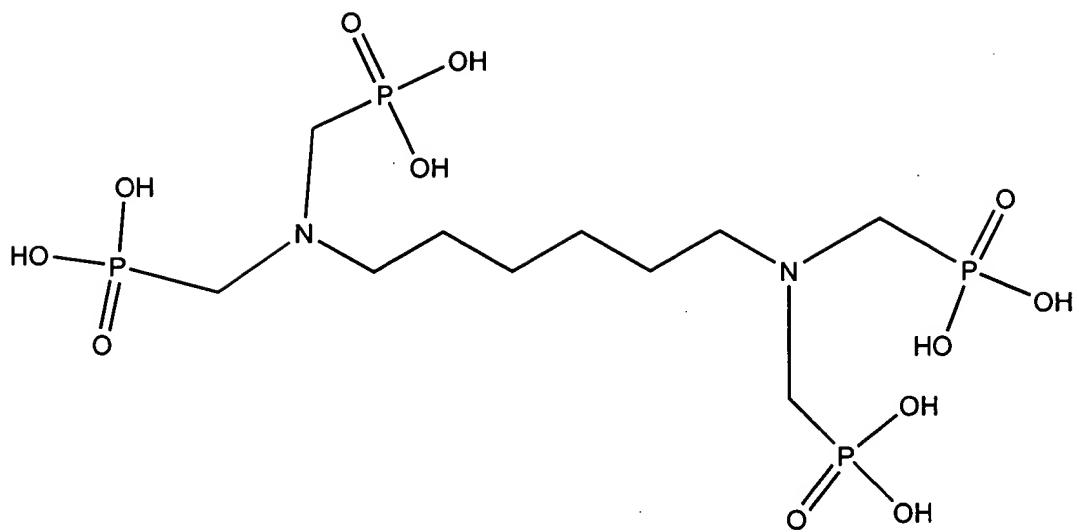


(2-Hydroxy-2-phosphono-ethyl)-phosphonic acid

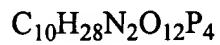


ethane hydroxylphosphonic acid

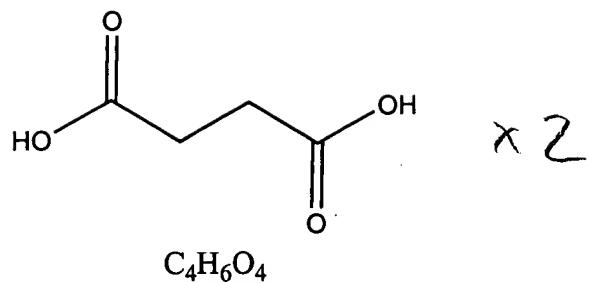
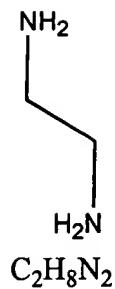
edhp



({[6-(Bis-phosphonomethyl-amino)-hexyl]-phosphonomethyl-amino}-methyl)-phosphonic acid



hexamethylene diaminetetra(methylene-  
phosphonic  
acid)



Ethylenediamine disuccinic acid

EDDS  
exists as  
salt in Registry

=> b reg

FILE "REGISTRY" ENTERED AT 11:16:42 ON 28 DEC 2004  
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 DEC 2004 HIGHEST RN 802853-20-9  
DICTIONARY FILE UPDATES: 26 DEC 2004 HIGHEST RN 802853-20-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 7429-90-5 REGISTRY  
CN Aluminum (8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 0100MSR  
CN 0670TS  
CN 0900X  
CN 1001M  
CN 102B  
CN 102C  
CN 1100H24  
CN 1100P-H18  
CN 13T  
CN 1440YL  
CN 1N300  
CN 350D  
CN 350F  
CN 40XD  
CN 5207N  
CN 5422NS  
CN 550N  
CN 561SW  
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CN 716ON  
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CN 7620NS  
CN 7640NS  
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CN AA 15 (metal)  
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ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
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DR 12766-45-9, 113962-66-6, 37202-64-5, 80341-19-1, 91728-14-2, 39302-71-1,  
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MF A1  
 CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS,  
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 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*,  
 DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,  
 ENCOMPPAT2, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*,  
 MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*, TOXCENTER, TULSA, UOLIDAT,  
 USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Cplus document type: Book; Conference; Dissertation; Journal; Patent;  
 Preprint; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC  
 (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);  
 PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role  
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 (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);  
 PRP (Properties); RACT (Reactant or reagent); USES (Uses)

A1

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

350735 REFERENCES IN FILE CA (1907 TO DATE)  
 11020 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 351003 REFERENCES IN FILE CAPLUS (1907 TO DATE)

f=> d fcn l11 ;

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 0100MSR  
 CN 0670TS  
 CN 0900X  
 CN 1001M  
 CN 102B  
 CN 102C  
 CN 1100H24  
 CN 1100P-H18  
 CN 13T  
 CN 1440YL  
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 CN 550N

CN 561SW  
CN 5654NS  
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CN A 999V  
CN A 99N  
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CN Alpaste WXM 5422  
CN Alpaste WXM 760b  
CN Alpaste WXM 7675  
CN Alpaste WXM-T 60B  
CN Alpaste WXM-U 75  
CN Alpaste WXM-U 75C  
CN Altop X  
CN Aluchrome Ultrafin Super  
CN Aluminium  
CN Aluminium Flake  
CN Aluminum 27  
CN Aluminum atom  
CN Aluminum element  
CN Aluminum Flake PCF 7620  
CN Aluminum powder  
CN Aluminum powder 02-0005  
CN Alumipaste 98-1822T  
CN Alumipaste CR 300  
CN Alumipaste GX 180A  
CN Alumipaste GX 201A  
CN Alumipaste HR 7000  
CN Alumipaste HR 850  
CN Alumipaste MG 11  
CN Alumipaste MH 8801  
CN APV  
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CN Aquamet NPW 2900  
CN Aquapaste 205-5  
CN Aquasilver LPW  
CN ASB  
CN ASB (metal)  
CN Astroflake 40  
CN Astroflake Black N 020  
CN Astroflake Black N 070

CN Astroflake LG 40  
CN Astroflake LG 70  
CN Astroflake Silver N 040  
CN Astroshine NJ 1600  
CN Atomizalumi VA 200  
CN AW 600  
CN AW 666C  
CN AW 7000R  
CN AW 808  
CN AW 808C  
CN AXX 1005  
CN BL 2060  
CN C.I. 77000  
CN C.I. Pigment Metal 1  
CN Chromal IV  
CN Chromal X  
CN CR 300  
CN CR 50FM  
CN CR 51GM  
CN CR 9800RM  
CN Decomet 1001/10  
CN DS 5002  
CN E 173  
CN E 30B  
CN E 347  
CN E 347 (pigment)  
CN EBP 251PA  
CN Ecka AS 081  
CN Elamet 100  
CN Elamet 250  
CN Elamet 500  
CN EPC 8E297  
CN EPC 8E340  
CN ET 2025  
CN Eterna Brite 301-1  
CN Eterna Brite 601-1  
CN Eterna Brite 651-1  
CN Eterna Brite Primier 251PA  
CN Fine 900  
CN FM 4010WG  
CN Friend Color F 500GR-W  
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CN H 5 (metal)  
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CN Hisparkle HS 2  
CN HR 51  
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CN HR 808  
CN HR 850  
CN Hydro Paste 8726  
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CN JISC 3108  
CN JISC 3110  
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CN Lansford 243  
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CN LE Sheet 800  
CN Leafing Alpast  
CN LEPC 2027

CN LG 100  
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CN Metana  
CN Metasheen KM 100  
CN Metasheen Slurry 1807  
CN Metasheen Slurry 1811  
CN Metasheen Slurry KM 100  
CN Metax  
CN Metax G  
CN Metax S  
CN MF 20  
CN MG 21  
CN MG 21 (metal)  
CN MG 51  
CN MH 6601  
CN MH 8801  
CN MH 8803  
CN MH 8805  
CN Mirror Glow 1000  
CN Mirror Glow 600  
CN MJ 450  
CN Noral Aluminium  
CN Noral Extra Fine Lining Grade  
CN Noral Ink Grade Aluminium  
CN O 100T  
CN Obtron 10890  
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CN Reynolds 4-591  
CN Reynolds 400  
CN Reynolds 667  
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CN SAP 1110W

CN SAP 120  
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CN SAP 771N  
CN SAP-FM 4010  
CN SAP-SL 440  
CN SAP-VD 20  
CN SBC 516-20Z  
CN SBT 554RD  
CN Serumekku  
CN Setanium 50MIS-H8  
CN SHORIC  
CN Siberline ET 2025  
CN Siberline ST 21030E1  
CN Silvar A  
CN Silver VT 522  
CN Silverline SSP 353  
CN SL 800  
CN SL 800 (metal)  
CN SP-FM 4000  
CN SP-FM 8000  
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CN Sparkle Silver 3500  
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CN Sparkle Silver 5271AR  
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CN Sparkle Silver 5745  
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CN Sparkle Silver 7500  
CN Sparkle Silver E 1745AR  
CN Sparkle Silver L 1526AR  
CN Sparkle Silver SS 3130  
CN Sparkle Silver SS 5242AR  
CN Sparkle Silver SS 5588  
CN Special PCR 507  
CN Spota Mobil 801  
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CN SS 7000AR  
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CN SSP 554  
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CN Stapa 20HK  
CN Stapa Aloxal PM 2010  
CN Stapa Aloxal PM 3010  
CN Stapa Aloxal PM 4010  
CN Stapa Hydrolac BG 8n.1  
CN Stapa Hydrolac BGH Chromal X  
CN Stapa Hydrolac PM Chromal VIII  
CN Stapa Hydrolac W 60NL  
CN Stapa Hydrolac WH 16  
CN Stapa Hydrolux 2192  
CN Stapa Hydrolux 8154  
CN Stapa Metallic R 607  
CN Stapa Metallux 1050  
CN Stapa Metallux 211  
CN Stapa Metallux 212  
CN Stapa Metallux 2196  
CN Stapa Mobilux 181  
CN Stapa Offset 3000  
CN Stapa PV 10

CN Stapa VP 46432G  
 CN Super Fine 18000  
 CN Superfine 18000WN  
 CN Superfine 22000WN  
 CN Superfine P 7  
 CN Supramex 2022  
 CN T 2054  
 CN TCR 3010  
 CN TCR 3040  
 CN Toyo Aluminum 02-0005  
 CN Toyo Aluminum 93-3040  
 CN Transmet K 102HE  
 CN Tufflake 3645  
 CN Tufflake 5843  
 CN US Aluminum 809  
 CN UT 901  
 CN VA 2000  
 CN VA 350  
 CN VA 500  
 CN Valimet H 3  
 CN VD 20  
 CN VI 5  
 CN VI 5 (metal)  
 CN VSvA 97N  
 CN VTS 0115  
 CN VTSO 112  
 CN White Silver 7080N  
 CN White Silver 7130N  
 CN WJP-U 75C  
 CN WX 0630  
 CN WX 1130  
 CN WXMO 630  
 CN WZ 7160  
 CN XI 1136  
 CN YP 580  
 CN ZB 1-0  
 CN ZB 1-0 (metal)

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L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 7440-67-7 REGISTRY  
 CN zirconium (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN zirconium  
 CN Zirconium element  
 DR 141631-74-5, 141631-75-6, 141631-77-8, 182260-46-4  
 MF Zr  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOPHARMA, BIOSIS, BIOTECHNO,  
 CA, CABAB, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,  
 CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DRUGU, EMBASE,  
 ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB\*, IFICDB, IFIPAT,  
 IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*,  
 TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CPlus document type: Book; Conference; Dissertation; Journal; Patent;  
 Preprint; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC  
 (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);  
 PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role  
 in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC  
 (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);  
 PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);  
 MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
 NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical

study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

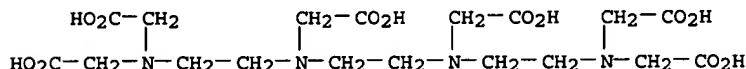
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

66654 REFERENCES IN FILE CA (1907 TO DATE)  
 4413 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 66694 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L16 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 18719-04-5 REGISTRY  
 CN 3,6,9,12-Tetraazatetradecanedioic acid, 3,6,9,12-tetrakis(carboxymethyl)-, hexasodium salt (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glycine, N,N'-ethylenabis[N-[2-[bis(carboxymethyl)amino]ethyl]-, hexasodium salt (8CI)  
 OTHER NAMES:  
 CN Chelest Q  
 CN Clewat TH  
 CN Hexasodium triethylenetetraminehexaacetate  
 CN Triethylenetetraaminehexaacetic acid hexasodium salt  
 CN Triethylenetetraminehexaacetic acid, hexasodium salt  
 CN TTHA hexasodium salt  
 MF C18 H30 N4 O12 . 6 Na  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA CAPplus document type: Journal; Patent  
 RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses); NORL (No role in record)  
 RL.NP Roles from non-patents: ANST (Analytical study); PRP (Properties)  
 CRN (869-52-3)



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40 REFERENCES IN FILE CA (1907 TO DATE)  
 40 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 869-52-3 REGISTRY  
 CN 3,6,9,12-Tetraazatetradecanedioic acid, 3,6,9,12-tetrakis(carboxymethyl)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Acetic acid, [ethylenabis[[(carboxymethyl)imino]ethylenenitrilo]]tetra- (6CI, 7CI)  
 CN Glycine, N,N'-ethylenabis[N-[2-[bis(carboxymethyl)amino]ethyl]- (8CI)  
 OTHER NAMES:  
 CN (Triethylenetetraamino)hexaacetic acid  
 CN Triethylenetetramine-N,N,N',N'',N''',N''''-hexaacetic acid  
 CN Triethylenetetraminehexaacetic acid  
 CN TTHA  
 CN [Ethylenebis[[(carboxymethyl)imino]ethylenenitrilo]]tetraacetic acid  
 FS 3D CONCORD  
 DR 20261-67-0  
 MF C18 H30 N4 O12  
 CI COM  
 LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,

CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

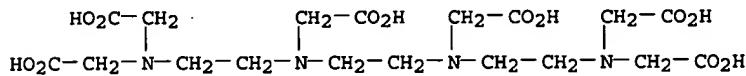
DT.CA CAplus document type: Conference; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

667 REFERENCES IN FILE CA (1907 TO DATE)  
 186 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 667 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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L19 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 155639-79-5 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, mixt. with calcium chloride (CaCl<sub>2</sub>) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Calcium chloride (CaCl<sub>2</sub>), mixt. contg. (9CI)

OTHER NAMES:

CN calcium chloride-DTPA mixt.

MF C14 H23 N3 O10 . Ca Cl2

CI MXS

SR CA

LC STN Files: BIOBUSINESS, CA, CAPLUS, TOXCENTER

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: ANST (Analytical study); USES (Uses)

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CRN 10043-52-4

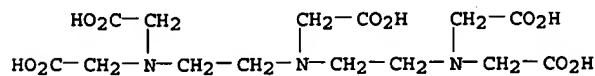
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Cl-Ca-Cl

CM 2

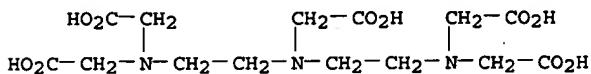
CRN 67-43-6

CMF C14 H23 N3 O10



4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

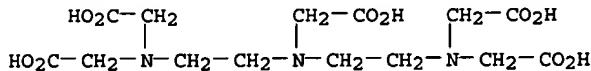
L19 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 33320-12-6 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, lanthanum complexes (8CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, lanthanum-140La salt  
 CN Lanthanum-140 DTPA  
 DR 26251-84-3  
 MF C14 H23 N3 O10 . x La  
 LC STN Files: CA, CAPLUS, GMELIN\*  
 (\*File contains numerically searchable property data)  
 DT.CA CAPLUS document type: Conference; Journal  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study)  
 CRN (67-43-6)



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2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 13078-36-9 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, trisodium salt (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Diethylenetriaminepentaacetic acid trisodium salt  
 CN Trisodium diethylene triaminepentaacetate  
 CN Trisodium DTPA  
 MF C14 H23 N3 O10 . 3 Na  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CHEMLIST, GMELIN\*, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CAPLUS document type: Journal; Patent  
 RL.P Roles from patents: BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)  
 CRN (67-43-6)

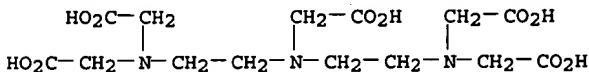


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15 REFERENCES IN FILE CA (1907 TO DATE)  
 15 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L19 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 2531-75-1 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Ca-DTPA  
 CN Calcium diethylenetriaminepentaacetate  
 CN Calcium diethylenetriaminepentaacetic acid  
 CN Calcium DTPA

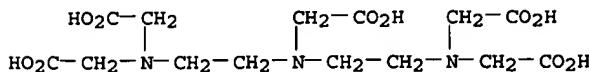
CN Diethylenetriamine pentaacetic acid, calcium salt  
 CN DTPA-Ca  
 DR 15168-13-5  
 MF C14 H23 N3 O10 . Ca  
 LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,  
 CHEMLIST, CIN, CSChem, DDFU, DRUGU, EMBASE, NIOSHTIC, PROMT, RTECS\*,  
 TOX CENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CAplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: BIOL (Biological study); MSC (Miscellaneous); USES  
 (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); PROC (Process); PRP  
 (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological  
 study); USES (Uses)  
 CRN (67-43-6)



● Ca

112 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 112 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

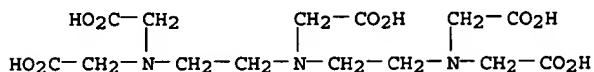
L19 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 1420-46-8 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, disodium salt (8CI,  
 9CI) (CA INDEX, NAME)  
 OTHER NAMES:  
 CN Diethylenetriamine-N,N,N',N'',N'''-pentaacetic acid disodium salt  
 CN DTPA disodium salt  
 MF C14 H23 N3 O10 . 2 Na  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, GMELIN\*, IFICDB, IFIPAT,  
 IFIUDB, TOX CENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA CAplus document type: Conference; Journal; Patent  
 RL.P Roles from patents: BIOL (Biological study); RACT (Reactant or  
 reagent); USES (Uses); NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological  
 study)  
 RL.NP Roles from non-patents: PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological  
 study); PREP (Preparation)  
 CRN (67-43-6)



2 Na

23 REFERENCES IN FILE CA (1907 TO DATE)  
 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 23 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L19 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 140-01-2 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, pentasodium salt  
 (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Anti Cal 8  
 CN Chel 330  
 CN Chelest P  
 CN Clewat DP 80  
 CN Detarex PY  
 CN Diethylenetriaminepentaacetic acid pentasodium salt  
 CN Diethylenetriaminepentakis(acetic acid) pentasodium salt  
 CN Dissolvine D 50  
 CN DTPA pentasodium salt  
 CN Hamp-ex 80  
 CN Pentasodium diethylenetriaminepentaacetate  
 CN Pentasodium Pentetate  
 CN Perma Kleer 140  
 CN Plexene D  
 CN Sodium diethylenetriaminepentaacetate  
 CN Syntron C  
 CN Tetalon B  
 CN Trilon C  
 CN Versenex 80  
 DR 59232-96-1, 81647-97-4  
 MF C14 H23 N3 O10 . 5 Na  
 CI COM  
 LC STN Files: AQUIRE, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
 CHEMCATS, CHEMLIST, CIN, CSCHEM, GMELIN\*, HSDB\*, IFICDB, IFIPAT, IFIUDB,  
 MSDS-OHS, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CAplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP  
 (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in  
 record)  
 RLD.NP Roles for non-specific derivatives from non-patents: PROC (Process)  
 CRN (67-43-6)

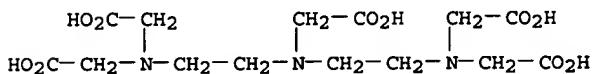


● 5 Na

457 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 457 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L19 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 67-43-6 REGISTRY  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)  
 OTHER NAMES:  
 CN 1,1,4,7,7-Diethylenetriaminepentaacetic acid  
 CN 3,6,9-Triazaundecanedioic acid, 3,6,9-tris(carboxymethyl)-  
 CN Acetic acid, 2,2',2'',2'''-[[[carboxymethyl]imino]bis(2,1-  
 ethanediylnitrilo)]tetrakis-  
 CN Chel 330 acid  
 CN Chel DTPA  
 CN Clewat DA  
 CN Complexon V  
 CN Dabeersen 503

CN Detapac  
 CN Detarex  
 CN DETP  
 CN DETPA  
 CN Diethylenetriamine-N,N,N',N'',N'''-pentaacetic acid  
 CN Diethylenetriaminepentaacetic acid  
 CN Dissolvine D  
 CN DPTA  
 CN DTPA  
 CN Hamp-Ex Acid  
 CN Monaquest CAI  
 CN N,N-Bis[2-[bis(carboxymethyl)amino]ethyl]glycine  
 CN NSC 7340  
 CN Pentacarboxymethyl diethylenetriamine  
 CN Pentetic acid  
 CN Titriplex V  
 CN [(Carboxymethyl)imino]bis(ethylenenitrilo)tetraacetic acid  
 FS 3D CONCORD  
 DR 573987-64-1, 13407-13-1, 6889-50-5, 7575-40-8, 25737-54-6, 84932-15-0,  
 49758-21-6  
 MF C14 H23 N3 O10  
 CI COM  
 SR CA  
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMLIST, CIN, CSChem, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*,  
 HODOC\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
 PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, UOLIDAT, USAN, USPAT2,  
 USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Cplus document type: Book; Conference; Dissertation; Journal; Patent;  
 Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
 NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation);  
 PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES  
 (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
 study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses)



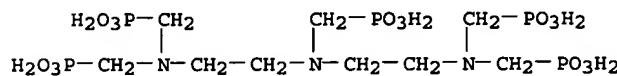
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5960 REFERENCES IN FILE CA (1907 TO DATE)  
 1909 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 5965 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d ide 121

L21 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 15827-60-8 REGISTRY  
 CN Phosphonic acid, [(phosphonomethyl)imino]bis[2,1-  
 ethanediylnitrilobis(methylene)]tetrakis- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Phosphonic acid, [(bis[2-[bis(phosphonomethyl)amino]ethyl]amino)methyl]-  
 (8CI)  
 OTHER NAMES:

CN CIX  
 CN Cublen D 50  
 CN Dequest 2060  
 CN Dequest 2060S  
 CN DETPMP  
 CN Diethylenetriamine-N,N,N',N'',N'''-penta(methylenephosphonic acid)  
 CN Diethylenetriamine-N,N,N',N'',N'''-pentakis(methylenephosphonic acid)  
 CN Diethylenetriaminepenta(methylenephosphonic acid)  
 CN Diethylenetriaminopentakis(methylenephosphonic acid)  
 CN Diethylenetriaminopenta(methylphosphonic acid)  
 CN Diethylenetriaminopenta(methylenephosphonic acid)  
 CN DQ 2060  
 CN DTPF  
 CN DTPMP  
 CN DTPP  
 CN DTPPA  
 CN Ethylenetriaminepenta(methylenephosphonic acid)  
 CN Lonza 905  
 CN Sequion 40H50  
 CN Versenate PS  
 FS 3D CONCORD  
 DR 67774-91-8, 244775-22-2, 291513-72-9  
 MF C9 H28 N3 O15 P5  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAPLUS,  
     CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, GMELIN\*, IFICDB, IFIPAT,  
     IFIUDB, MEDLINE, MSDS-OHS, PIRA, PROMT, TOXCENTER, ULIDAT, USPAT2,  
     USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CAplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
     MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
     (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
     study); BIOL (Biological study); PREP (Preparation); PROC (Process);  
     RACT (Reactant or reagent); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
     study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU  
     (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
     (Reactant or reagent); USES (Uses)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
     study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU  
     (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
     (Reactant or reagent); USES (Uses)



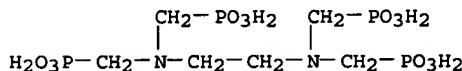
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

864 REFERENCES IN FILE CA (1907 TO DATE)  
 113 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 865 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d ide 123

L23 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 1429-50-1 REGISTRY  
 CN Phosphonic acid, [1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis- (9CI)  
     (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Phosphonic acid, [ethylenebis(nitrilodimethylene)]tetra- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN Cublen 3115  
 CN Dequest 2040  
 CN Dequest 2041  
 CN Editempa  
 CN EDDPA  
 CN EDDPA (chelating agent)

CN EDTF  
 CN EDTMP  
 CN EDTMPA  
 CN EDTPA  
 CN EDTPH  
 CN Ethylenedi(nitrilodimethylene)tetraphosphonic acid  
 CN Ethylenediamine-N,N,N',N'-tetra(methylphosphonic acid)  
 CN Ethylenediamine-N,N,N',N'-tetrakis(methylenephosphonic acid)  
 CN Ethylenediaminetetra(methylenephosphonic acid)  
 CN Ethylenediaminetetrakis(methylenephosphonic acid)  
 CN Ethylenediaminetetrakis(methylphosphonic acid)  
 CN Ethylenediaminetetramethylenephosphonate  
 CN Ethylenediaminetetra(methylenephosphonic acid)  
 CN N,N,N',N'-Tetrakis(phosphonomethyl)ethylenediamine  
 CN Wayplex 45K  
 CN [Ethylenebis(nitrilodimethylene)]tetraphosphonic acid  
 FS 3D CONCORD  
 DR 54579-31-6, 66300-26-3, 85497-53-6, 244775-21-1  
 MF C6 H20 N2 O12 P4  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,  
 CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB,  
 MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, SPECINFO, TOXCENTER, ULIDAT, USPAT2,  
 USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CPlus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
 NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation);  
 PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES  
 (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP  
 (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
 study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses)



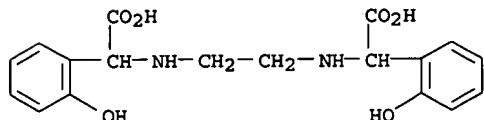
## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1167 REFERENCES IN FILE CA (1907 TO DATE)  
 232 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1169 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d ide 124

L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 1170-02-1 REGISTRY  
 CN Benzeneacetic acid, .alpha..alpha.'-(1,2-ethanediylidimino)bis[2-hydroxy-  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glycine, N,N'-ethylenebis[2-(o-hydroxyphenyl)- (6CI, 8CI)  
 OTHER NAMES:  
 CN (2,2'-Ethylenedimino)bis[(2-hydroxyphenyl)acetic acid]  
 CN CHEL 138  
 CN Chel DP  
 CN Dissolvine Q

CN EDBPHA  
 CN EDDHA  
 CN EDHPA  
 CN Ethylenediamine[(o-hydroxyphenyl)glycine]  
 CN Ethylenediamine-N,N'-bis(2-hydroxyphenylacetic acid)  
 CN Ethylenediamine-N,N'-bis(o-hydroxyphenylacetic acid)  
 CN Ethylenediamine-N,N'-bis(.alpha.- (2-hydroxyphenyl)acetic acid)  
 CN Ethylenediamine-N,N'-di[o-hydroxyphenylacetic acid]  
 CN Ethylenediaminebis(2-hydroxyphenylacetic acid)  
 CN Ethylenediaminebis(o-hydroxyphenylacetic acid)  
 CN Ethylenediaminedi-o-hydroxyphenylacetic acid  
 CN N,N'-Ethylenediaminebis(o-hydroxyphenylglycine)  
 CN N,N'-Ethylenediaminebis[2-(o-hydroxyphenyl)glycine]  
 FS 3D CONCORD  
 DR 15162-65-9, 15475-97-5, 23648-82-0, 118936-20-2  
 MF C18 H20 N2 O6  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
     BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,  
     CSCHEM, DDFU, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB, IPA,  
     MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
     OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);  
     RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
     study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP  
     (Properties); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
     study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP  
     (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in  
     record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
     study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU  
     (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
     (Reactant or reagent); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

457 REFERENCES IN FILE CA (1907 TO DATE)  
 104 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 456 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 33 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d his

(FILE 'HOME' ENTERED AT 09:15:38 ON 28 DEC 2004)

FILE 'HCAPLUS' ENTERED AT 09:15:50 ON 28 DEC 2004

L1 1 US20010046479/PN  
     E UK2000-1130/AP, PRN  
     E GB2000-1130/AP, PRN  
 L2 1 GB2000-1130/AP, PRN  
     E GB2000-1131/AP, PRN  
 L3 1 GB2000-1131/AP, PRN  
 L4 1 L1-3

FILE 'REGISTRY' ENTERED AT 09:17:37 ON 28 DEC 2004

FILE 'HCAPLUS' ENTERED AT 09:17:40 ON 28 DEC 2004  
 L5 TRA L4 1- RN : 8 TERMS

FILE 'REGISTRY' ENTERED AT 09:17:40 ON 28 DEC 2004

L6 8 SEA L5

FILE 'WPIX' ENTERED AT 09:17:44 ON 28 DEC 2004

L7 1 US20010046479/PN  
 E GB2000-1130/AP, PRN  
 L8 1 GB2000-1130/AP, PRN  
 L9 1 GB2000-1131/AP, PRN  
 L10 1 L7-9

FILE 'REGISTRY' ENTERED AT 09:34:04 ON 28 DEC 2004

L11 1 ALUMINUM/CN  
 L12 1 ZIRCONIUM/CN  
 L13 QUE (PMS OR MAN OR IDS)/CI OR COMPD OR COMPOUND OR UNSPECIFIED  
 L14 2 C18H30N4O12 AND TTHA NOT L13  
 L15 10 C14H23N3O10 AND (DTPA OR DETPA) NOT L13  
 L16 9 L15 NOT (NC=4 OR AMMONIUM (1A) HYDROGEN (1A) CARBONATE)  
 L17 7 L16 NOT 4 (1A) AMINOBENZOATE  
 E DTPMP/CN  
 L18 1 DTPMP/CN  
 L19 1 C9H28N3O15P5 AND DTPMP NOT L13  
 E EDHP/CN  
 E EDTMP/CN  
 L20 1 EDTMP/CN  
 L21 1 C6H20N2O12P4 AND EDTMP  
 E EDDS/CN  
 E EDDHA/CN  
 L22 1 EDDHA/CN  
 L23 2 C18H20N2O6 AND EDDHA  
 L24 42 C10H28N2O12P4  
 L25 38 L24 AND PHOSPHONIC (1A) ACID  
 L26 27 L25 AND HEXANEDIYL  
 L27 23 L26 NOT (L13 OR MXS/CI)  
 L28 4 L26 NOT L27  
 L29 7066 C2H8N2  
 L30 71 L29 NOT L13 AND ETHYLENEDIAMINE  
 L31 478 C2H8O7P2  
 L32 347 L31 NOT L13  
 L33 333 L32 AND PHOSPHONIC (1A) ACID  
 L34 3 L33 AND ETHAN  
 SEL RN 2-3  
 L35 2 E1-2 AND L34  
 L36 316 L33 AND HYDROXYETHYL  
 L37 316 L35-36

FILE 'HCAPLUS' ENTERED AT 11:20:25 ON 28 DEC 2004

L38 QUE L11 OR ALUMINUM OR ALCOA OR ALCAN OR ALPASTE OR ALUMIPASTE  
 L39 QUE L12 OR ZIRCONIUM OR ZR  
 L40 QUE L14 OR L17 OR L19 OR L37 OR L21 OR L22  
 L41 516 TTHA OR CHELEST OR CLEWAT OR TRIETHYLENETETRAAMINEHEXACETIC (1A  
 L42 10320 ETHYLENEBIS (3A)CARBOXYMETHYL (1A) IMINO (1A) EHTYLENENITRILO (1A  
 L43 707 DIETHYLENEDIAMINE (5A) PENTAACETIC (1A) ACID  
 L44 8510 (DIETHYLENETRIAMINEPENTAKIS (1A)ACETIC OR PENTETIC) (1A) ACID O  
 L45 1384 CIX OR CUBLEN OR DEQUEST OR DIETHYLTRIAMINE (5A) (PENTA OR PENT

FILE 'REGISTRY' ENTERED AT 11:39:02 ON 28 DEC 2004

L46 326849 AL/ELS  
 L47 135421 ZR/ELS

(FILE 'HCAPLUS' ENTERED AT 11:39:16 ON 28 DEC 2004

L48 QUE L47  
 L49 457 EDITMPA OR EDPA OR EDTF OR EDTMP OR EDTMPA OR EDTPA OR EDTPN O  
 L50 15 TETRAKIS (1A) PHOSPHONOMETHYL (1A) ETHYLENEDIAMINE OR ETHYLENEB  
 L51 931 CHEL OR DISSOLVINE OR EDBPFA OR EDDHA OR EDHPA OR ETHYLENE? (1A  
 E DEODOR/CT  
 E E9+ALL  
 L52 8238 DEODORANTS+NT/CT  
 E COATING MATERIALS/CT  
 E E3+ALL  
 L53 317 COATING MATERIALS+OLD,NT/CT (L) (DEODOR? OR DEODOUR?)  
 E DEODOR/CT  
 E E9+ALL  
 E E18+ALL  
 L54 510 AIR FRESHENERS/CT  
 E E7+ALL  
 L55 25724 "ODOR AND ODOROUS SUBSTANCES"+OLD,NT/CT  
 E E17

E E3+ALL  
 L56 5609 DEODORIZATION/CT  
 L57 1356 (L38 OR L39 OR L48) AND L52-56  
 L58 10 L57 AND (L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L49 OR L50 O  
     E LANDA A/AU  
 L59 35 E3,E10  
     E LANDA ANDREW/AU  
 L60 8 E4-5  
     E MAKIN S/AU  
 L61 10 E4,E11-12  
     E MCKAY V/AU  
 L62 3 E3,E6  
     E MC KAY V/AU  
 L63 10998 UNILEVER/CS, PA  
 L64 2 L58 AND L59-63  
 L65 8 L58 NOT L64  
     SEL AN 1 3-8  
 L66 7 E1-14 AND L65  
 L67 4577 (L38 OR L39 OR L48) AND COSMET?/CC,SX  
 L68 33 L67 AND (L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L49 OR L50 O  
 L69 3 L68 AND L59-63  
 L70 3 L64 OR L69  
 L71 30 L68 NOT L70  
 L72 26 L71 NOT L65  
     SEL AN 1-21  
 L73 21 E15-55 AND L72  
 L74 28 L66 OR L73

=> b hcap  
 FILE 'HCAPLUS' ENTERED AT 12:40:11 ON 28 DEC 2004  
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 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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FILE COVERS 1907 - 28 Dec 2004 VOL 142 ISS 1  
 FILE LAST UPDATED: 24 Dec 2004 (20041224/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L70 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:490268 HCAPLUS  
 DN 141:42568  
 ED Entered STN: 17 Jun 2004  
 TI Process for manufacture of personal care products utilizing a concentrate water phase  
 IN Divone, Peter Anthony; Biercevicz, Walter Anthony; Regan, Joseph James; Bridges, Christy Ann; Priest, Kimberly Ann  
 PA Unilever Home & Personal Care USA, USA  
 SO U.S. Pat. Appl. Publ., 11 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K007-00  
 NCL 424401000  
 CC 62-4 (Essential Oils and Cosmetics)  
 FAN.CNT 1  
 PATENT NO.            KIND            DATE            APPLICATION NO.            DATE  
 -----            -----            -----            -----            -----  
 PI US 2004115230            A1            20040617            US 2002-320029            20021216  
 WO 2004054695            A1            20040701            WO 2003-EP12419            20031103  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,  
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-320029 A 20021216

## CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

US 2004115230 ICM A61K007-00  
NCL 424401000

AB A process which may be continuous is provided for manufacture of personal care product compns. The process involves feeding a first water phase which is a concentrate containing most if not all water soluble ingredients of the composition into a blending tube. A second phase which can be oily or aqueous and a third water phase, the latter being essentially pure water, are also fed into the blending tube. All of the phases are transported through the tube at a flow rate of about 5 to about 5000 lb/min and at a pressure of about 10 to about 5000 psi. Preferably the tube leads into a homogenizer such as a sonolator. For example, a pair of skin lotions were prepared to reflect a 2x and a 10x level of concentrate. Both concs. with the appropriate amount of added water will attain the resultant composition comprising (i) an oil phase containing stearic acid 2.0217%, glycol stearate/stearamide AMP 1.1939%, glycerol monostearate 0.5572%, cetyl alc. 0.3184%, petrolatum 0.5%, mineral oil 1.4%, and dimethicone 0.3%, and (ii) an aqueous phase containing water 79.4078%, tetrasodium EDTA 0.1017%, magnesium aluminum silicate 0.2%, glycerin 3.5%, methylparaben 0.1425%, titanium dioxide (water dispersible) 0.1%, Carbopol 934 (2% active in water) 9%, triethanolamine 0.7568%, Aloe vera gel 0.09%, DMDM hydantoin 0.25%, and fragrance 0.16%.

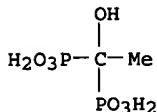
ST conc water phase liq personal care compn

IT Hair preparations  
(conditioners; process for manufacture of liquid personal care products utilizing concentrate water phase)IT Raspberry  
(extract; process for manufacture of liquid personal care products utilizing concentrate water phase)IT Aloe barbadensis  
(gel; process for manufacture of liquid personal care products utilizing concentrate water phase)IT Cosmetics  
(lotions; process for manufacture of liquid personal care products utilizing concentrate water phase)IT Proteins  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(oat; process for manufacture of liquid personal care products utilizing concentrate water phase)IT Cosmetics  
Shampoos  
(process for manufacture of liquid personal care products utilizing concentrate water phase)IT Hydrocarbon oils  
Keratins  
Lecithins  
Petrolatum  
Sunflower oilRL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(process for manufacture of liquid personal care products utilizing concentrate water phase)IT Sterols  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(soya; process for manufacture of liquid personal care products utilizing concentrate water phase)IT Fatty acids, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(sunflower-oil, ethoxylated; process for manufacture of liquid personal care products utilizing concentrate water phase)

IT 56-81-5, Glycerin, biological studies 57-11-4, Stearic acid, biological studies 58-95-7, Vitamin E acetate 64-02-8, Tetrasodium EDTA 77-92-9, Citric acid, biological studies 79-81-2, Vitamin A palmitate 99-76-3, Methylparaben 102-71-6, Triethanolamine, biological studies 1327-43-1, Magnesium aluminum silicate 2809-21-4, Dequest 2010 4065-45-6, Benzophenone-4 6440-58-0, DMDM

hydantoin 9004-65-3, Hydroxypropyl methyl cellulose 9006-65-9, Dimethicone 9007-16-3, Carbopol 934 12125-02-9, Ammonium chloride, biological studies 13463-67-7, Titanium dioxide, biological studies 25383-99-7, Sodium stearoyl lactylate 31566-31-1, Glycerol monostearate 36574-66-0D, N-coco acyl derivs. 36653-82-4, Cetyl alcohol 42557-10-8 55965-84-9, Kathon CG 81859-24-7, Polyquaternium-10 704883-45-4  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(process for manufacture of liquid personal care products utilizing concentrate water phase)

IT 2809-21-4, Dequest 2010  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(process for manufacture of liquid personal care products utilizing concentrate water phase)  
RN 2809-21-4 HCAPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L70 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:545448 HCAPLUS  
DN 135:126946  
ED Entered STN: 27 Jul 2001  
TI Anti-microbial compositions comprising a salt of a transition metal chelator  
IN Johnson, Paula Ann; Landa, Andrew Sjaak; Makin, Stephen Anthony; McMillan, Ian Robert  
PA Unilever PLC, UK; Unilever NV; Hindustan Lever Limited  
SO PCT Int. Appl., 52 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM A61K007-32  
ICS A61K031-14; A61K031-205  
CC 62-4 (Essential Oils and Cosmetics)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001052805	A1	20010726	WO 2001-EP118	20010108
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP	1248591	A1	20021016	EP 2001-900136	20010108
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR	2001007657	A	20021119	BR 2001-7657	20010108
AU	775652	B2	20040812	AU 2001-23729	20010108
US	2001033854	A1	20011025	US 2001-764734	20010117
ZA	2002005190	A	20030627	ZA 2002-5190	20020627
PRAI	GB 2000-1132	A	20000118		
	GB 2000-1133	A	20000118		
	WO 2001-EP118	W	20010108		

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001052805	ICM	A61K007-32	
	ICS	A61K031-14; A61K031-205	
US 2001033854	ECLA	A61K007/50K6B; A61K008/04F; A61K008/41; A61K008/41L; A61K008/44; A61K008/84; A61Q015/00; A61Q017/00	

AB Disclosed are antimicrobial compns. for use on the outer surface of the human body or on apparel worn in close proximity thereto comprising a carrier material and a salt of a transition metal chelator comprising a transition metal chelator anion and particular organic cations. The chelator salts possess great formulation flexibility, being compatible with a wide

range of other materials, and are believed to function by inhibiting the up-take of essential transition metal nutrients by microbes. Preferred chelators have high affinity for iron (III). DTPA was added to ethanol and to this mixture was added 2-amino-2-methyl-1-propanol. Iso-Pr myristate was added to the resulting solution and the mixture was sealed into a conventional aluminum deodorant can and liquefied propellant was introduced into the can.

ST antimicrobial deodorant chelator DTPA polyaminocarboxylate salt  
 IT Deodorants (personal)  
     (deodorants containing transition metal chelator salts)  
 IT Transition metals, biological studies  
     RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (deodorants containing transition metal chelator salts)  
 IT Antibacterial agents  
     Chelating agents  
     (deodorants containing transition metal chelator salts and bactericides)  
 IT Deodorants (personal)  
     (sprays; deodorants containing transition metal chelator salts)  
 IT 20074-52-6, Ferric ion, biological studies  
     RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (deodorants containing transition metal chelator salts)  
 IT 351317-35-6 351317-36-7 351317-37-8 351317-38-9 351317-39-0  
     351317-40-3 351317-41-4  
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
     (Uses)  
     (deodorants containing transition metal chelator salts)  
 IT 32289-58-0, Cosmocil cq  
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
     (Uses)  
     (deodorants containing transition metal chelator salts and bactericides)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ciba Geigy Ag; DE 19620644 A 1997 HCPLUS
- (2) Kraskin, K; US 4356190 A 1982 HCPLUS
- (3) Voss, J; US 3507796 A 1970 HCPLUS

L70 ANSWER 3 OF 3 HCPLUS COPYRIGHT 2004 ACS on STN

AN 2001:545447 HCPLUS

DN 135:111741

ED Entered STN: 27 Jul 2001

TI Antimicrobial deodorant containing transition metal chelators and antiperspirant actives

IN Landa, Andrew Sjaak; Makin, Stephen Anthony;  
 McKay, Victoria Anne

PA Unilever PLC, UK; Unilever NV; Hindustan Lever Limited

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-32

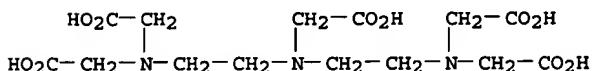
ICS A61K007-38

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001052804	A1	20010726	WO 2001-EP111	20010108
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2396959	AA	20010726	CA 2001-2396959	20010108
	BR 2001007689	A	20021119	BR 2001-7689	20010108
	EP 1259215	A1	20021127	EP 2001-942542	20010108
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	AU 772448	B2	20040429	AU 2001-28457	20010108
	US 2001046479	A1	20011129	US 2001-764829	20010117
	ZA 2002005100	A	20030904	ZA 2002-5100	20020625
PRAI	GB 2000-1130	A	20000118		
	GB 2000-1131	A	20000118		
	WO 2001-EP111	W	20010108		

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2001052804	ICM	A61K007-32
		ICS	A61K007-38
	US 2001046479	ECLA	A61K007/32; A61K007/32M
AB	Disclosed are antimicrobial products comprising an antiperspirant active and an amount of transition metal chelator sufficient to enhance the deodorancy performance of said antiperspirant active. The transition metal chelator salt improves the antimicrobial performance of the antiperspirant active and the two components can be co-formulated. Particular products are antiperspirant deodorant compns. Preferred chelator salts have high affinity for iron (III). A stick deodorant antiperspirant contained AZAG 25, talc 3.2, stearyl alc. 14, hydrogenated castor oil 4, PEG-8 distearate 1, DTPA 1, poly(hexamethylene biguanide) stearate 0.215, and volatile silicone DC 245 q.s. to 100 %.		
ST	antiperspirant aluminum zirconium DTPA chelator deodorant		
IT	Antiperspirants Chelating agents Deodorants (personal) (antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
IT	Transition metals, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
IT	Deodorants (personal) (sprays; antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
IT	Deodorants (personal) (sticks; antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
IT	20074-52-6, Ferric ion, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
IT	67-43-6, DTPA 869-52-3, TTHA 1327-41-9, Aluminum chlorohydrate 3380-34-5, Triclosan 4602-84-0, Farnesol 190606-35-0, AZAG 217631-98-6 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
RE.CNT	8	THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD	
RE	<ol style="list-style-type: none"> <li>(1) Colgate Palmolive Co; WO 9843604 A 1998 HCPLUS</li> <li>(2) Motley, C; US 5516511 A 1996 HCPLUS</li> <li>(3) Motley, C; US 5849276 A 1998 HCPLUS</li> <li>(4) Procter &amp; Gamble; EP 0483426 A 1992 HCPLUS</li> <li>(5) Procter &amp; Gamble; WO 9956717 A 1999 HCPLUS</li> <li>(6) Sane, J; US 5705171 A 1998</li> <li>(7) Sane, J; US 5725846 A 1998 HCPLUS</li> <li>(8) Sane, J; US 5939055 A 1999 HCPLUS</li> </ol>		
IT	67-43-6, DTPA RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (antimicrobial deodorant containing transition metal chelators and antiperspirant actives)		
RN	67-43-6 HCPLUS		
CN	Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)		



=> d all hitstr 174 tot

L74 ANSWER 1 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:1089535 HCPLUS  
 ED Entered STN: 20 Dec 2004

TI Lifting cream for dry and sensitive skin  
 IN Chigarina, K. M.; Alaverdiev, I. M. O.; Zalevskaya, S. I.; Andreeva, E. V.; Sapozhnikova, T. I.; Rychenkova, T. V.; Zhukova, O. P.  
 PA Otkrytoe Aktsionernoe Obshchestvo Kosmeticheskoe Ob'edinenie "Svoboda", Russia  
 SO Russ., No pp. given  
 CODEN: RUXXE7  
 DT Patent  
 LA Russian  
 IC ICM A61K007-48  
 ICS A61K007-00  
 CC 62 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RU 2242216	C1	20041220	RU 2003-112201	20030428
PRAI RU 2003-112201			20030428	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
RU 2242216	ICM	A61K007-48
		ICS A61K007-00

AB FIELD: cosmetol. SUBSTANCE: the suggested lifting-cream for dry and sensitive skin contains structure-forming emulsifying agents, emollients, cyclomethicone, moisturizing additives - glycerol or propylene glycol, butyric phase, biol. active supplements, pigments, Me and Pr ethers of paraoxybenzoic acid or Katon CG, or Hermaben II, or bronitrol or bronopol, perfumery composition and water. It, addnl., contains gelating agents - carbomers or carbopol and neutralizing agents - triethanolamine or sodium hydroxide, or tech. caustic soda, UV-filters - the mixture of octylmethoxycinnamate, butylmethoxydibenzoyl-methane, octylsalicylate at the ratio of 1 : 1 : 1 or the mixture of octylmethoxycinnamate and butylmethoxybenzoyl-methane at the ratio of 1 : 1, trilon B, as structure-forming emulsifying agents it contains the mixture of PEG-100 stearate and glycerol monostearate at the ratio of 1 : 1, high-mol. synthetic alcs. C16-C18 or primary synthetic fatty alcs. of C16-C20 fraction, glyceryloleate, polysorbate-60, cosmetic stearin, as emollients - octyldodecanol, octylstearate, dicapryl ether, pentaerythrityl tetraisostearate, as moisturizing additive it addnl. contains allantoin, as butyric phase - isopropylpalmitate or isopropylmyristate, as biol. active additives it contains cacao oil, schi oil, avocado oil, peach oil, aqueous-alc. extract of chamomile flowers or aqueous-alc.-glycerol extract of chamomile flowers, or extract of chamomile flowers in propylene glycol, hydrolyzed soybean protein, plankton extract, vitamin E, phytosterol sulfate, as pigments - aluminum starch octenylsuccinate. The suggested lifting-cream "Diamant" for dry and sensitive skin smoothes the netting of small wrinkles and corrects facial contour in the course of continuous moisturizing and prolonged protection against UV-radiation. It has been proved by flattened teeth of small wrinkles on an average: Rt average By 6.5%, R max average By 5.0%, R z-d average By 10.6%. EFFECT: higher efficiency of application.1 tbl.

L74 ANSWER 2 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:856917 HCPLUS  
 DN 141:337304  
 ED Entered STN: 18 Oct 2004  
 TI Teeth whitening system based on the combination of hydrogen peroxide and carbamide peroxide

IN Orlowski, Jan A.; Butler, David V.; Shiah, Thomas; Mapar, Mahin  
 PA USA  
 SO U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K007-20  
 NCL 424053000  
 CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004202621	A1	20041014	US 2003-746124	20031223
PRAI US 2002-436118P	P	20021223		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004202621	ICM	A61K007-20

NCL 424053000

AB Disclosed are compns. for bleaching teeth, comprising a single component part or two or more components blended together before each application. The compns. offer extended shelf life and accelerated bleaching action while significantly reducing the possibility of user discomfort. In preferred embodiments, the composition or one of its parts comprises a blend of hydrogen peroxide and carbamide peroxide in a solution having the consistency of a gel or a viscous liquid. The compns. contain solvents such as propylene glycol, thickening agents such as cellulose derivs. and stabilizers such as 1-hydroxyethylidene-1,1-diphosphonic acid. The inventive system allows for water in the composition to avoid tissue desiccation and associated user discomfort, without compromising the shelf life of the composition

ST tooth whitening compn peroxide

IT Dentifrices

Stabilizing agents

Thickening agents

Tooth  
(teeth whitening system based on the combination of hydrogen peroxide and carbamide peroxide)

IT Peroxides, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(teeth whitening system based on the combination of hydrogen peroxide and carbamide peroxide)

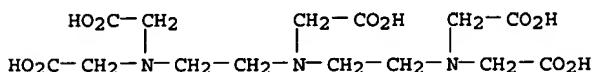
IT 124-43-6, Carbamide peroxide 7722-84-1, Hydrogen peroxide, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(teeth whitening system based on the combination of hydrogen peroxide and carbamide peroxide)

IT 56-81-5, Glycerol, biological studies 57-55-6, Propylene glycol, biological studies 64-02-8, Tetrasodium EDTA 64-17-5, Ethanol, biological studies 140-01-2 148-24-3, 8-Quinolinol, biological studies 150-25-4, Diethanol glycine 2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid 5064-31-3, Trisodium nitrilotriacetate 6419-19-8, Aminotrimethylenephosphonic acid 7487-88-9, Magnesium sulfate, biological studies 7681-49-4, Sodium fluoride, biological studies 7722-88-5, Sodium pyrophosphate 7732-18-5, Water, biological studies 7758-29-4, Sodium tripolyphosphate 7783-47-3, Stannous fluoride 7784-30-7, Aluminum phosphate 9004-32-4, Sodium cm cellulose 9004-34-6D, Cellulose, ethers 10163-15-2, Sodium monofluorophosphate 11138-49-1, Sodium aluminate 12773-27-2, Sodium tin oxide 13870-30-9, Sodium trisilicate 15827-60-8, Diethylenetriamine penta(methylenephosphonic acid) 16871-71-9, Zinc hexafluorosilicate 16893-85-9  
RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(teeth whitening system based on the combination of hydrogen peroxide and carbamide peroxide)

IT 140-01-2 2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid 15827-60-8, Diethylenetriamine penta(methylenephosphonic acid)  
RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(teeth whitening system based on the combination of hydrogen peroxide and carbamide peroxide)

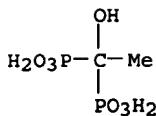
RN 140-01-2 HCPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, pentasodium salt (8CI, 9CI) (CA INDEX NAME)

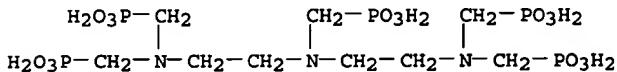


●5 Na

RN 2809-21-4 HCPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



RN 15827-60-8 HCAPLUS  
 CN Phosphonic acid, [(phosphonomethyl)imino]bis[2,1-ethanediyl]nitrilobis(methylene)]tetrakis- (9CI) (CA INDEX NAME)



L74 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:628693 HCAPLUS  
 DN 141:162435  
 ED Entered STN: 05 Aug 2004  
 TI Deodorant water-absorbing fabrics and washable diapers having the absorbents  
 IN Sano, Shinji; Shintaku, Tomonori; Horiike, Taizo  
 PA Toray Industries, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM A61F013-49  
 ICS A61F005-44; A61F005-441; A61F013-15; A61F013-53; A61L009-01; B32B005-26; D04H001-40; A61F013-472  
 CC 63-7 (Pharmaceuticals)  
 Section cross-reference(s): 40

FAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 -----  
 PI JP 2004215693 A2 20040805 JP 2003-3086 20030109  
 PRAI JP 2003-3086 20030109

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2004215693	ICM	A61F013-49
	ICS	A61F005-44; A61F005-441; A61F013-15; A61F013-53; A61L009-01; B32B005-26; D04H001-40; A61F013-472
JP 2004215693	FTERM	3B029/BA14; 3B029/BB01; 3B029/BC03; 3B029/BD22; 3B029/BG05; 4C003/AA16; 4C003/BA01; 4C003/CA01; 4C003/HA01; 4C080/AA03; 4C080/AA05; 4C080/AA06; 4C080/BB02; 4C080/CC03; 4C080/CC05; 4C080/CC08; 4C080/CC12; 4C080/JJ09; 4C080/KK08; 4C080/LL03; 4C080/LL10; 4C080/MM01; 4C080/MM02; 4C080/MM05; 4C080/MM06; 4C080/MM14; 4C080/MM18; 4C080/NN22; 4C098/AA09; 4C098/CC02; 4C098/CC19; 4C098/DD05; 4C098/DD06; 4C098/DD10; 4C098/DD17; 4C098/DD21; 4C098/DD27; 4F100/AA03A; 4F100/AA20A; 4F100/AB02A; 4F100/AB10A; 4F100/AB11A; 4F100/AB17A; 4F100/AB18A; 4F100/AB24A; 4F100/AD11A; 4F100/AH02A; 4F100/AK42; 4F100/AK48; 4F100/CA30A; 4F100/CA30B; 4F100/DG01; 4F100/DG11A; 4F100/DG11B; 4F100/DG15A; 4F100/DG15B; 4F100/JD02; 4F100/JD15A; 4F100/JD15B; 4F100/YY00; 4L047/AA21; 4L047/AA23; 4L047/AA27; 4L047/AB02; 4L047/AB07; 4L047/AB08; 4L047/BA04; 4L047/CA02; 4L047/CB10; 4L047/CC04

AB The water absorbent have void content .gt;req.10 cm<sup>3</sup>/100 cm<sup>2</sup> and thickness 1-20 mm, and mainly comprise synthetic fibers with denier per filament 0.01-2 dtex. Also claimed are reusable diapers having an air-permeable top sheet, a liquid-impermeable back sheet, and the water absorbent. The absorbents show good water absorbency, high deodorant effect, and washing resistance, and have reduced wetness on the surface. Thus, a nonwoven fabric, prepared by splitting poly(butylene terephthalate)-nylon 6 composite fibers and interlaced by water jet, was impregnated with an aqueous composition containing Al-silicate, diethylenetriaminepentaacetic acid, and TiO<sub>2</sub>, squeezed using a mangle, and dried at 160.degree. to give a water absorbent fabric. The fabric eliminated odors of NH<sub>3</sub>, MeSH,

skatole, and indole and inhibited growth of MRSA and MSSA.

ST deodorant water absorbing nonwoven fabric split fiber washable diaper; aminopolycarboxylic acid deodorant water absorbing fabric washable diaper

IT Polyamide fibers, biological studies  
 RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (6, biconstituent with poly(butylene terephthalate) fiber, split, nonwoven fabric; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Carboxylic acids, biological studies  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (aliphatic; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Absorbents  
 Deodorants  
 Diapers  
 (deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Bentonite, biological studies  
 Polyamides, biological studies  
 RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Porous materials  
 (deodorants; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Carboxylic acids, biological studies  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deodorants; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Aluminosilicates, biological studies  
 RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deodorants; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Antibacterial agents  
 (industrial; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Polyester fibers, biological studies  
 RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (poly(tetramethylene terephthalate), biconstituent with nylon 6 fiber, split, nonwoven fabric; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT Amino acids, biological studies  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polycarboxylic; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT 7440-44-0, Activated carbon, biological studies  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (activated, deodorant; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT 60-00-4, Ethylenediaminetetraacetic acid, biological studies  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT 74-93-1, Methyl mercaptan, processes 83-34-1, Scatole 120-72-9, Indole, processes 7664-41-7, Ammonia, processes  
 RL: REM (Removal or disposal); PROC (Process)  
 (deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT 67-43-6, Diethylenetriaminepentaacetic acid  
 1335-30-4, Aluminum silicate 7631-86-9, Sylysia 550, biological studies 13463-67-7, Titania, biological studies 428874-66-2, SZ 2B  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deodorant; deodorant water-absorbing fabrics comprising synthetic fibers and washable diapers having the absorbents)

IT 26062-94-2, Poly(butylene terephthalate)

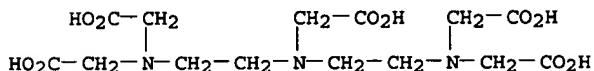
RL: REM (Removal or disposal); PROC (Process)  
 (fiber, biconstituent with nylon 6 fiber, split, nonwoven fabric;  
 deodorant water-absorbing fabrics comprising synthetic fibers and  
 washable diapers having the absorbents)

IT 24968-12-5, Poly(butylene terephthalate)  
 RL: TEM (Technical or engineered material use); THU (Therapeutic use);  
 BIOL (Biological study); USES (Uses)  
 (fiber, biconstituent with nylon 6 fiber, split, nonwoven fabric;  
 deodorant water-absorbing fabrics comprising synthetic fibers and  
 washable diapers having the absorbents)

IT 25038-54-4, Nylon 6, biological studies  
 RL: TEM (Technical or engineered material use); THU (Therapeutic use);  
 BIOL (Biological study); USES (Uses)  
 (fiber, biconstituent with poly(butylene terephthalate) fiber, split,  
 nonwoven fabric; deodorant water-absorbing fabrics comprising synthetic  
 fibers and washable diapers having the absorbents)

IT 67-43-6, Diethylenetriaminepentaacetic acid  
 RL: BSU (Biological study, unclassified); TEM (Technical or engineered  
 material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deodorant; deodorant water-absorbing fabrics comprising synthetic  
 fibers and washable diapers having the absorbents)

RN 67-43-6 HCPLUS  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)



L74 ANSWER 4 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:219814 HCPLUS  
 DN 140:258665  
 ED Entered STN: 19 Mar 2004  
 TI Dentifrice compositions comprising talc and fluoride and abrasive  
 IN Yang, Lijiang; Yue, Jiang; Fei, Yunbin; Wang, Yun; Xu, Xiujun  
 PA The Procter & Gamble Company, USA  
 SO U.S. Pat. Appl. Publ., 5 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K007-18  
 NCL 424052000  
 CC 62-7 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004052736	A1	20040318	US 2003-618472	20030711
	WO 2004024112	A1	20040325	WO 2003-US28614	20030911
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2002-410094P P 20020912

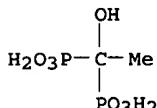
## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004052736	ICM	A61K007-18
	NCL	424052000

AB: A dentifrice composition comprises 1-50% talc, a fluoride salt that provides 1-3000 ppm fluoride, 5-50% by weight an abrasive polishing material, 30-90% of 1 or more aqueous carriers. The dentifrice composition has a pH of .gtoreq.8 at 25.degree.. Thus, a formulation contained NaF 0.20, talc, 10.0, 70% sorbitol solution 45.0, precipitated silica 15.0 27.9 solution sodium alkyl sulfate 7.5, trisodium phosphate 1., sodium CMC 1.0, carbomer-956 0.3, sodium saccharin 0.25, TiO2 (Rutile) 0.25, flavor 0.9, and water 17.8%.

ST dentifrice talc abrasive fluoride  
 IT Abrasives

Chelating agents  
 Dentifrices  
 Dyes  
 Flavoring materials  
 Humectants  
 Polishing  
 Surfactants  
 Sweetening agents  
 Thickening agents  
 (dentifrice compns. comprising talc and fluoride and abrasive)  
 IT Carbonates, biological studies  
 Diphosphates  
 Phosphates, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (dentifrice compns. comprising talc and fluoride and abrasive)  
 IT Polyphosphoric acids  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (sodium salts; dentifrice compns. comprising talc and fluoride and abrasive)  
 IT Pollyphosphates  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (triphosphates; dentifrice compns. comprising talc and fluoride and abrasive)  
 IT 60-00-4, EDTA, biological studies 64-19-7, Acetic acid, biological  
 studies 77-92-9, biological studies 83-86-3, Phytic acid 87-69-4,  
 biological studies 541-50-4, Diacetic acid, biological studies  
 1317-80-2, Rutile 2809-21-4, EHDP 7631-97-2, Sodium  
 fluorophosphate 7681-49-4, Sodium fluoride, biological studies  
 7783-47-3, Stannous fluoride 7783-49-5, Zinc fluoride 7784-18-1,  
 Aluminum fluoride 7789-23-3, Potassium fluoride 12304-65-3,  
 Hydrotalcite 13463-67-7, Titanium dioxide, biological studies  
 14807-96-6, Talc, biological studies 16984-48-8, Fluoride, biological  
 studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (dentifrice compns. comprising talc and fluoride and abrasive)  
 IT 2809-21-4, EHDP  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (dentifrice compns. comprising talc and fluoride and abrasive)  
 RN 2809-21-4 HCPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L74 ANSWER 5 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:18717 HCPLUS  
 DN 140:81858  
 ED Entered STN: 09 Jan 2004  
 TI Hair relaxer compositions generating hydroxide ions with a visual  
 indicator  
 IN Nguyen, Nghi Van; Cannell, David W.  
 PA L'Oreal, S.A., USA  
 SO U.S. Pat. Appl. Publ., 10 pp.  
 CODEN: USXXCO

DT Patent  
 LA English  
 IC ICM A61K007-06  
 ICS A61K007-09  
 NCL 424070200; 424070400  
 CC 62-3 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004005284	A1	20040108	US 2002-183431	20020628
	US 6800277	B2	20041005		
PRAI	US 2002-183431		20020628		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004005284	ICM	A61K007-06

ICS A61K007-09  
 NCL 424070200; 424070400  
 US 2004005284 ECLA A61K008/19; A61K008/365; A61K008/44; A61Q005/04  
 AB: A method for lanthionizing keratin fibers to achieve relaxation using a combination of at least one carbonate compound, at least one chelating acid, and at least one hydroxide compound, as well as multicomponent kits for lanthionizing keratin fibers are provided. For example, a calcium hydroxide cream was prepared containing (by weight) cetyl alc. 1.0%, Steareth-2 0.5%, Steareth-10 2.5%, mineral oil 15.0%, petrolatum 5.5%, cetearyl alc. and cetearyl phosphate 7.5%, propylene glycol 3.0%, calcium hydroxide 5.0%, and water 60.0%. Relaxers formed from calcium hydroxide cream and Na2EDTA and KHCO3 can straighten natural kinky hair.

ST carbonate chelating acid hydroxide hair relaxer kit

IT Chelating agents  
 (acid; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Sulfonic acids, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (amino; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Surfactants  
 (amphoteric; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Surfactants  
 (anionic; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Surfactants  
 (cationic; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Acids, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (chelating; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Cream  
 Emulsions  
 Foams  
 Gels  
 Pastes  
 Solutions  
 Sunscreens  
 Suspensions  
 (hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Alcohols, biological studies  
 Alkali metal hydroxides  
 Alkaline earth hydroxides  
 Amino acids, biological studies  
 Carbonates, biological studies  
 Crown ethers  
 Hydrocarbon oils  
 Hydroxides (inorganic)  
 Polymers, biological studies  
 Polysiloxanes, biological studies  
 Proteins  
 Thiols (organic), biological studies  
 Vitamins  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Actinide compounds  
 Rare earth compounds  
 Transition metal compounds  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (hydroxides; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Carboxylic acids, biological studies  
 Sulfonic acids, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (hydroxy; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Keratins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (lanthionizing of; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Surfactants  
 (nonionic; hair relaxer compns. comprising carbonate compound, chelating

acid, and hydroxide compound with visual indicator)

IT Hair preparations  
(straighteners; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Amines, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(sulfo-; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Hydroxides (inorganic)  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(transition metal; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT Fats and Glyceridic oils, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(vegetable; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

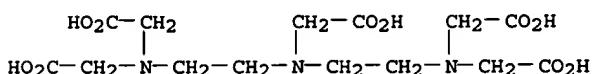
IT Surfactants  
(zwitterionic; hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT 60-00-4, Ethylenediamine tetraacetic acid, biological studies  
67-43-6, Diethylenetriaminepentaacetic acid  
77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid, biological studies 93-62-9, N-2-Hydroxyethyliminodiacetic acid 139-13-9, Nitrilotriacetic acid 139-33-3, Disodium edetate 150-39-0, N-(Hydroxyethyl)ethylenediamine triacetic acid 298-14-6, Potassium bicarbonate 497-19-8, Sodium carbonate, biological studies 584-08-7, Potassium carbonate 866-84-2, Potassium citrate 1305-62-0, Calcium hydroxide, biological studies 1309-42-8, Magnesium hydroxide 2817-45-0, Aminophosphonic acid 6419-19-8, Aminotrimethylene phosphonic acid 7408-20-0, Iminodisuccinic acid 12672-51-4, Cobalt hydroxide 17194-00-2, Barium hydroxide 18480-07-4, Strontium hydroxide 18933-05-6, Manganese hydroxide 20427-58-1, Zinc hydroxide 20427-59-2, Cupric hydroxide 21645-51-2, Aluminum hydroxide, biological studies 100224-74-6, Guanidine carbonate 126853-99-4, Molybdenum hydroxide 148124-42-9, N-Lauroyl-N,N',N'-ethylenediaminetriacetic acid  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT 463-79-6, Carbonic acid, formation (nonpreparative)  
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)  
(hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

IT 67-43-6, Diethylenetriaminepentaacetic acid  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(hair relaxer compns. comprising carbonate compound, chelating acid, and hydroxide compound with visual indicator)

RN 67-43-6 HCPLUS  
CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)



L74 ANSWER 6 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:502162 HCPLUS  
DN 139:218951  
ED Entered STN: 02 Jul 2003  
TI Cosmetic composition for protection of skin against ultraviolet rays  
IN Allakhverdov, G. R.; Matkovskaya, T. A.; Sevast'yanov, V. G.; Akol'tseva, A. Yu.  
PA Obshchestvo s Ogranichennoi Otvetstvennost'yu "Institut Farmatsevticheskikh Reaktivov Refarm", Russia  
SO Russ., No pp. given  
CODEN: RUXXE7  
DT Patent  
LA Russian  
IC ICM A61K007-40  
ICS A61K007-42  
CC 62-4 (Essential Oils and Cosmetics)  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI RU 2203033 C2 20030427 RU 2001-108282 20010329  
 PRAI RU 2001-108282  
 CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

RU 2203033 ICM A61K007-40  
 ICS A61K007-42

AB The cosmetic composition comprises 0.1-15 weight % of metal oxide nanopigment of lamellar form taken among the group of zirconium, titanium, zinc, cerium oxides or their compns. and also 0.1-20 weight % of cosmetically acceptable bis-phosphonate with cosmetically acceptable base showing UV-protective functions. Composition expands assortment of agents used for protection of skin against UV rays. Invention can be used in production of external cosmetic agents used for protection of skin against effect of UV rays.

ST sunscreen nanopigment zirconium titanium zinc cerium oxide bisphosphonate

IT Sunscreens  
 (cosmetic composition for protection of skin against UV rays)

IT Particle size  
 (nanoscale; cosmetic composition for protection of skin against UV rays)

IT 1306-38-3, Cerium oxide, biological studies 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium oxide, biological studies 13463-67-7, Titanium oxide, biological studies 13598-36-2D, Phosphonic acid, alkylidenebis- derivs. 134579-07-0  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

IT 1314-23-4, Zirconium oxide, biological studies  
 134579-07-0

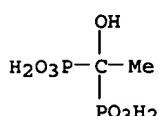
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (cosmetic composition for protection of skin against UV rays)

RN 1314-23-4 HCPLUS

CN Zirconium oxide (ZrO<sub>2</sub>) (8CI, 9CI) (CA INDEX NAME)

O—Zr—O

RN 134579-07-0 HCPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis-, potassium sodium salt (9CI)  
 (CA INDEX NAME)



x K

x Na

L74 ANSWER 7 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN

AN 2003:394815 HCPLUS

DN 138:406632

ED Entered STN: 23 May 2003

TI Dentifrice compositions comprising diglycerol

IN Stier, Roger E.

PA Noville, Inc., USA

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 1312354	A1	20030521	EP 2002-90372	20021111
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2003091514	A1	20030515	US 2001-8844	20011113
	US 2003095931	A1	20030522	US 2002-266493	20021008
	US 6723304	B2	20040420		
PRAI	US 2001-8844	A	20011113		
	US 2002-266493	A	20021008		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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EP 1312354	ICM	A61K007-16
EP 1312354	ECLA	A61K008/34D; A61Q011/00
US 2003095931	ECLA	A61K008/34D; A61Q011/00

AB The invention relates to oral care compns. such as toothpaste, gels, tooth powders, mouthwashes, mouth rinses, gums, mouth sprays and lozenges comprising diglycerol. The diglycerol is used as a humectant in the compns. The compns. may further comprise water, flavoring agents, active compds., emulsifier, alc., sweeteners, thickening agents, surfactants, suspending agents, astringent and toning drug exts., abrasives or polishes, deodorizing agents, preservatives, flavoring buffers, whitening agents, wound-healing and inflammation inhibiting substances, colorants, dyes, pigments, abrasives, polishes, antimicrobial agents, pH buffers and other additives and fillers. Thus, mouthrinse gels contained PEG 3.00, CMC 0.50, carrageenan 0.30, diglycerol 30.00, saccharin 0.30, licorice extract 0.20, silica 15.00, pigments 1.01, TiO2 0.10, sorbitol 36.20, flavoring 2.00, surfactant 1.15 and water qs to 100%.

ST dentifrice diglycerol surfactant flavoring

IT Glycerides, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(C8-10; dentifrice compns. comprising diglycerol)

IT Amides, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(N-(hydroxyalkyl), sulfates; dentifrice compns. comprising diglycerol)

IT Sulfonic acids, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(alkanesulfonic, salts, C12-18; dentifrice compns. comprising  
diglycerol)

IT Skin preparations (pharmaceutical)  
(astringents; dentifrice compns. comprising diglycerol)

IT Vinyl compounds, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(carboxy-containing, polymers; dentifrice compns. comprising diglycerol)

IT Essential oils

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(clove; dentifrice compns. comprising diglycerol)

IT Chamomile

(components of; dentifrice compns. comprising diglycerol)

IT Abrasives

Anti-inflammatory agents

Antimicrobial agents

Buffers

Cassia

Cinnamon (spice)

Citrus limon

Citrus sinensis

Dentifrices

Deodorants

Dyes

Emulsifying agents

Flavoring materials

Gums and Mucilages

Humectants

Maranta arundinacea

Mouthwashes

Origanum

Pigments, nonbiological

Preservatives

Salvia

Surfactants

Sweetening agents

Thickening agents

Vanilla

Wound healing promoters  
(dentifrice compns. comprising diglycerol)

IT Alcohols, biological studies

Chalk  
 Clays, biological studies  
 Phosphates, biological studies  
 Polyesters, biological studies  
 Polyoxyalkylenes, biological studies  
 Thaumatin  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (dentifrice compns. comprising diglycerol)

IT Diglycerides  
 Monoglycerides  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (ethoxylated; dentifrice compns. comprising diglycerol)

IT Essential oils  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (eucalyptus; dentifrice compns. comprising diglycerol)

IT Dentifrices  
 (gels; dentifrice compns. comprising diglycerol)

IT Castor oil  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (hydrogenated, ethoxylated, Cremophor RH 40; dentifrice compns.  
 comprising diglycerol)

IT Drug delivery systems  
 (lozenges; dentifrice compns. comprising diglycerol)

IT Fats and Glyceridic oils, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (parsley; dentifrice compns. comprising diglycerol)

IT Essential oils  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (peppermint; dentifrice compns. comprising diglycerol)

IT Alcohols, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (polyhydric; dentifrice compns. comprising diglycerol)

IT Essential oils  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (spearmint; dentifrice compns. comprising diglycerol)

IT Monoglycerides  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (sulfates; dentifrice compns. comprising diglycerol)

IT Essential oils  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (wintergreen; dentifrice compns. comprising diglycerol)

IT 50-70-4, Sorbitol, biological studies 50-78-2D, Acetylsalicylic acid,  
 derivs. 56-81-5, Glycerol, biological studies 57-13-6, Urea,  
 biological studies 57-48-7, Fructose, biological studies 57-55-6,  
 Propylene glycol, biological studies 69-65-8, Mannitol 77-92-9, Citric  
 acid, biological studies 78-70-6, Linalool 79-20-9, Methyl acetate  
 81-07-2, Saccharin 81-07-2D, Saccharin, salts 87-99-0, Xylitol  
 89-78-1, Menthol 89-83-8, Thymol 94-13-3, Propyl p-Hydroxybenzoate  
 94-86-0D, Propenylguaiethol, derivs. 97-53-0, Eugenol 97-59-6,  
 Allantoin 98-11-3D, Benzenesulfonic acid, C12-16-alkyl esters 99-76-3,  
 Methyl p-Hydroxybenzoate 99-96-7, p-Hydroxybenzoic acid, biological  
 studies 100-88-9D, Cyclamate, salts 104-46-1, Anethole 104-55-2D,  
 Cinnamaldehyde, glycerol acetals 107-36-8D, Isethionic acid, acyl  
 derivs. 119-36-8, Methyl salicylate 120-47-8, Ethyl p-Hydroxybenzoate  
 123-03-5, CPC 128-44-9, Sodium Saccharin 139-05-9, Sodium Cyclamate  
 151-21-3, Sodium lauryl sulfate, biological studies 153-94-6,  
 D-Tryptophan 275-51-4, Azulene 470-82-6, Eucalyptol 471-34-1,  
 Calcium carbonate, biological studies 532-32-1, Sodium benzoate  
 538-71-6, Domiphen bromide 585-88-6, Maltitol 623-39-2,  
 3-Methoxypropane-1,2-diol 814-80-2, Calcium lactate 994-36-5, Sodium  
 citrate 1306-06-5, Hydroxylapatite 1335-30-4, Aluminum  
 silicate 1344-28-1, Aluminum oxide, biological studies  
 2243-42-7D, esters 3380-34-5, Triclosan 4316-73-8, Sodium sarcosinate  
 6851-61-2 7440-66-6D, Zinc, salts 7631-86-9, Silica,  
 biological studies 7631-97-2, Sodium monofluorophosphate 7664-93-9D,  
 Sulfuric acid, C12-18-alkyl esters, sodium salts 7681-49-4, Sodium  
 fluoride, biological studies 7757-81-5, Sodium sorbate 7757-93-9,  
 Dicalcium phosphate 7783-47-3, Stannous fluoride 8013-90-9D, Irisone,  
 derivs. 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Guar  
 gum 9000-40-2, Locust bean gum 9000-65-1, Tragacanth gum 9003-39-8,  
 Polyvinylpyrrolidone 9004-32-4, Carboxymethyl cellulose 9004-62-0,  
 Hydroxyethyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch,  
 biological studies 9005-27-0, Hydroxyethyl starch 10049-04-4, Chlorine  
 dioxide 10086-45-0, Calcium pyrophosphate 11138-66-2, Xanthan gum  
 13463-67-7, Titanium oxide, biological studies 14000-31-8, Pyrophosphate  
 15435-29-7, Bromochlorophene 16984-48-8, Fluoride, biological studies

21645-51-2, Aluminum oxide trihydrate, biological studies  
 22839-47-0, Aspartame 25322-68-3, Polyethylene glycol 33665-90-6,  
 Acesulfame 37353-59-6, Hydroxymethyl cellulose 39421-75-5,  
 Hydroxypropyl guar 50813-16-6, Sodium metaphosphate 51757-43-8,  
 1-Phosphonopropane-1,2,3-tricarboxylic acid 52993-54-1, Menthane  
 59113-36-9, Diglycerol 64519-82-0, Isomalt 65560-17-0D, derivs.  
 68190-68-1, Sodium Hydroxymethyl cellulose 97445-23-3, Gelcarin DG  
 106392-12-5, Polyethylene glycol-polypylene glycol block copolymer  
 528610-52-8, Magnasweet 120 528815-14-7, Timiron MP 49  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (dentifrice compns. comprising diglycerol)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

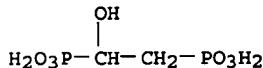
(1) Henkel KGAA; DE 19624870 A 1998 HCPLUS  
 (2) Henkel KGAA; DE 10015662 A 2001 HCPLUS  
 (3) Procter & Gamble; WO 9628133 A 1996 HCPLUS

IT 6851-61-2

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (dentifrice compns. comprising diglycerol)

RN 6851-61-2 HCPLUS

CN Phosphonic acid, (1-hydroxy-1,2-ethanediyl)bis- (9CI) (CA INDEX NAME)



L74 ANSWER 8 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN

AN 2003:376602 HCPLUS

DN 138:390553

ED Entered STN: 16 May 2003

TI Beta-glucuronidase inhibitors for use in deodorants and antiperspirants

IN Banowski, Bernhard; Wadle, Armin; Saettler, Andrea; Hoffmann, Daniele; Gerke, Thomas; Siegert, Petra

PA Henkel Kommanditgesellschaft Auf Aktien, Germany

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM A61K007-32

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003039505	A2	20030515	WO 2002-EP11981	20021026
	WO 2003039505	A3	20031127		
		W:	AU, BR, CA, CN, EE, HR, HU, IN, JP, LT, LV, MX, NO, NZ, PL, RO, SI, UA, US		
		RW:	AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR		
	DE 10154368	A1	20030515	DE 2001-10154368	20011106
	EP 1441691	A2	20040804	EP 2002-802630	20021026
		R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, SK		
	US 2004234466	A1	20041125	US 2004-838930	20040504
PRAI	DE 2001-10154368	A	20011106		
	WO 2002-EP11981	W	20021026		

CLASS

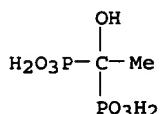
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003039505	ICM	A61K007-32
DE 10154368	ECLA	A61K008/02C; A61K008/04F; A61K008/06C; A61K008/20; A61K008/27; A61K008/34; A61K008/34D; A61K008/34F; A61K008/5; A61K008/36; A61K008/365; A61K008/44; A61K008/49C2; A61K008/49H; A61K008/49H2; A61K008/55; A61K008/60A; A61K008/67H; A61K008/97; A61K008/97C; A61Q015/00

OS MARPAT 138:390553

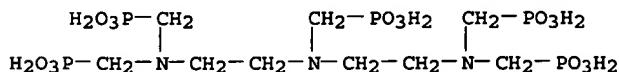
AB The invention relates to the non-therapeutic use of selected beta-glucuronidase inhibiting substances in a cosmetic deodorant or antiperspirant composition in order to reduce body odor caused by the decomposition of steroid esters. Thus a water-free antiperspirant stick contained (weight parts): silicone oil DC245 28; Eutanol G 16; Ucon Fluid AP 5; Cutina HR 6; Lorol C18 20; Eumulgin B3 3; aluminum chloride 20; talc

7.9; isopulegol 0.1.  
 ST deodorant beta glucuronidase inhibitor  
 IT Antiperspirants  
   Deodorants (personal)  
   (Beta-glucuronidase inhibitors for use in deodorants and  
   antiperspirants)  
 IT Flavonoids  
   Isoflavonoids  
   Tannins  
   RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
   (Beta-glucuronidase inhibitors for use in deodorants and  
   antiperspirants)  
 IT Aglycons  
   RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
   (anthocyanidins; Beta-glucuronidase inhibitors for use in deodorants  
   and antiperspirants)  
 IT Tea products  
   (beverages, green, extract of; Beta-glucuronidase inhibitors for use in  
   deodorants and antiperspirants)  
 IT Bacopa monnieri  
 Camellia japonica  
 Emblica  
 Hyssopus officinalis  
 Ilex paraguariensis  
 Phyllanthus emblica  
 Pinus pinaster  
 Rosmarinus officinalis  
 Salix  
 Serenoa repens  
 Spirulina platensis  
   (extract of; Beta-glucuronidase inhibitors for use in deodorants and  
   antiperspirants)  
 IT Olea europaea  
   (leaf, extract of; Beta-glucuronidase inhibitors for use in deodorants and  
   antiperspirants)  
 IT Amino acids, biological studies  
   RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
   (mycosporin-like; Beta-glucuronidase inhibitors for use in deodorants  
   and antiperspirants)  
 IT Glycosides  
   RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
   (raspberry ketone derivs.; Beta-glucuronidase inhibitors for use in  
   deodorants and antiperspirants)  
 IT 50-21-5, Lactic acid, biological studies 50-81-7D, Ascorbic acid,  
 glucosides 52-90-4, L-Cysteine, biological studies 56-40-6, Glycine,  
 biological studies 56-41-7, L-Alanine, biological studies 56-45-1,  
 L-Ser, biological studies 56-84-8, L-Asparaginic acid, biological  
 studies 56-85-9, L-Glutamine, biological studies 56-86-0, L-Glutamic  
 acid, biological studies 56-87-1, L-Lysine, biological studies  
 60-12-8, Phenylethylalcohol 60-18-4, L-Tyrosine, biological studies  
 60-81-1, Phlorizin 61-90-5, L-Leucine, biological studies 63-68-3,  
 L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological  
 studies 69-72-7, Salicylic acid, biological studies 70-47-3,  
 L-Asparagine, biological studies 71-00-1, L-Histidine, biological  
 studies 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine,  
 biological studies 73-22-3, L-Tryptophane, biological studies 73-32-5,  
 L-Isoleucine, biological studies 74-79-3, L-Arginine, biological studies  
 77-92-9D, Citric acid, esters with saccharides 79-14-1, Glycolic acid,  
 biological studies 83-86-3, Phytic acid 87-66-1, Pyrogallol  
 87-69-4D, esters with saccharides 89-79-2, Isopulegol 89-86-1,  
 2,4-Dihydroxy benzoic acid 90-64-2, Almond acid 98-79-3, Pyroglutamic  
 acid 99-10-5, 3,5-Dihydroxy benzoic acid 99-50-3, 3,4-Dihydroxy  
 benzoic acid 106-24-1, Geraniol 108-46-3, Resorcin, biological studies  
 108-73-6, Phloroglucin 120-80-9, 1,2-Benzenediol, biological studies  
 122-99-6, Phenoxyethanol 123-31-9, Hydroquinone, biological studies  
 125-46-2, Usnic acid 133-37-9D, Racemic acid, esters with saccharides  
 137-66-6, Ascorbylpalmitate 147-71-7D, esters with saccharides  
 147-73-9D, Erythralric acid, esters with saccharides 147-85-3, L-Proline,  
 biological studies 149-91-7, Gallic acid, biological studies 153-18-4,  
 Rutin 154-23-4, Catechin 303-07-1, 2,6-Dihydroxy benzoic acid  
 303-38-8, 2,3-Dihydroxy benzoic acid 327-97-9, Chlorogenic acid  
 331-39-5, Caffeic acid 446-72-0, Genistein 480-35-3, Eriodictin  
 485-72-3, Formononetin 486-66-8, Daidzein 490-79-9, 2,5-Dihydroxy  
 benzoic acid 499-44-5 501-30-4, Kojic acid 520-27-4, Diosmine  
 526-95-4, Gluconic acid 526-99-8, Galactaric acid 526-99-8D,  
 Galactaric acid, esters with saccharides 527-09-3, Copper gluconate

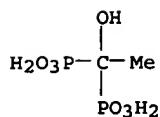
529-59-9, Genistin 536-08-3, Digallic acid 552-66-9, Daidzin 578-74-5 600-15-7, .alpha.-Hydroxybutyric acid 608-80-0, Hexahydroxybenzene 617-31-2, .alpha.-Hydroxyvaleric acid 685-73-4, Galacturonic acid 866-84-2, Tripotassium citrate 1115-67-9D, Hydroxymaleic acid, esters with saccharides 1135-24-6, Ferulic acid 1198-84-1, p-Hydroxymandelic acid 1327-41-9, Basic aluminum chloride 2131-66-0 2809-21-4 4468-02-4, Zinc gluconate 6064-63-7, Hexanoic acid, 2-hydroxy- 6543-97-1D, Mannaric acid, esters with saccharides 6703-05-5D, Arabinonic acid, esters with saccharides 6906-37-2, Mannonic acid 6915-15-7D, Hydroxysuccinic acid, esters with saccharides 7085-55-4, Troxerutin 7439-95-4D, Magnesium, glucoheptonate complexes 7733-02-0D, Zinc sulfate, cocoyl 10158-64-2D, Xylaric acid, esters with saccharides 10236-47-2, Narinigin 13040-19-2, Zinc ricinoleate 13241-33-3, Neohesperidin 13425-76-8, D-Fructuronic acid 13752-83-5, Arabinonic acid 15454-75-8 15827-60-8, Diethylene triamine penta(methylene phosphonic acid) 16039-53-5, Zinc lactate 16800-66-1 17812-24-7, Ribonic acid 17828-56-7, Xyloonic acid 18604-50-7, Eugenylglucoside 20283-92-5, Rosmarinic acid 20702-77-6, Neohesperidindihydrochalcone 22042-96-2, Dequest 2066 23351-51-1, Glucoheptonate acid 23351-51-1D, Glucoheptonate acid, magnesium complexes 23869-24-1, Monoxerutin 25525-21-7D, Glucaric acid, esters with saccharides 29329-71-3, Dequest 2016D 33012-62-3D, Ribaric acid, esters with saccharides 38963-94-9 40957-83-3, Glycitein 51222-59-4 53910-28-4, Disodium ascorbylsulfate 64052-89-7 90689-40-0D, D-arabino-2-Hexulosaric acid, esters with saccharides 128197-63-7 128808-26-4 130603-71-3, .alpha.-Glucosylrutin 132697-38-2 135322-32-6, Chitosan ascorbate 142174-80-9D, Hydroxypimelic acid, esters with saccharides 143454-48-2D, Hydroxyglutaric acid, esters with saccharides 143549-76-2 170492-24-7, Trilon M 210049-80-2D, Hydroxyadipic acid, esters with saccharides 221904-13-8 221904-19-4 270258-23-6, Eucarol AGE-SS 270258-24-7, Eucarol AGE-EC 301646-84-4, Eucarol AGE-ET 434328-18-4 525561-15-3D, esters with saccharides 525595-74-8, Bacocalmine 525595-75-9, Ederline H 525595-77-1, Eurlol BT 525595-78-2, Pantrofina PC 525595-79-3, Dermawhite HS-LS 8110B 525595-80-6, Ferulan Proactiv 525595-81-7, Dermosoft HMA 525595-82-8, Tinocare CP  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(Beta-glucuronidase inhibitors for use in deodorants and antiperspirants)  
IT 9001-45-0, .beta.-Glucuronidase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors of; Beta-glucuronidase inhibitors for use in deodorants and antiperspirants)  
IT 2809-21-4 15827-60-8, Diethylene triamine penta(methylene phosphonic acid) 29329-71-3, Dequest 2016D  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(Beta-glucuronidase inhibitors for use in deodorants and antiperspirants)  
RN 2809-21-4 HCPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



RN 15827-60-8 HCPLUS  
CN Phosphonic acid, [(phosphonomethyl)imino]bis[2,1-ethanediyl]nitrilobis(methylene)]tetrakis- (9CI) (CA INDEX NAME)



RN 29329-71-3 HCPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis-, sodium salt (9CI) (CA INDEX NAME)



x Na

L74 ANSWER 9 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:5468 HCPLUS  
 DN 138:41044

ED Entered STN: 03 Jan 2003  
 TI Compositions and methods for removing silver-oxide  
 IN Everson, Terrence P.; Anderson, Bryan  
 PA Ecolab Inc., USA  
 SO U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM C11D001-00

NCL 510108000; 510467000; 510505000

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003004073	A1	20030102	US 2001-876294	20010607
PRAI	US 2001-876294		20010607		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003004073	ICM	C11D001-00
	NCL	510108000; 510467000; 510505000
US 2003004073	ECLA	C11D003/00B8; C11D007/26A; C11D007/26D; C11D007/26K; C11D007/36

AB The present invention is directed to compns. for removing silver soil from the surface of objects. These compns. contain a reducing agent, and an alkaline source, and may optionally contain various other components including a chelating agent, cleaning agent, filler, an antcorrosion agent, a defoaming agent, an odorant, a dye, an antioxidant, or a bleaching agent. Methods of using the compns. are also disclosed, wherein the object to be cleaned is contacted with the composition and the object is then washed with an aqueous solution

ST silver oxide removing cleaning compn

IT Antifoaming agents

Antioxidants

Bleaching agents

Chelating agents

Cleaning solvents

Corrosion inhibitors

Dyes

Fillers

Odor and Odorous substances

Reducing agents

(compns. and methods for removing silver-oxide)

IT Alkali metal hydroxides

RL: TEM (Technical or engineered material use); USES (Uses)

(compns. and methods for removing silver-oxide)

IT 2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid

RL: TEM (Technical or engineered material use); USES (Uses)

(chelating agent; compns. and methods for removing silver-oxide)

IT 20667-12-3, Silver-oxide

RL: REM (Removal or disposal); PROC (Process)

(compns. and methods for removing silver-oxide)

IT 497-19-8, Sodium carbonate, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(compns. and methods for removing silver-oxide)

IT 7429-90-5, Aluminum, uses

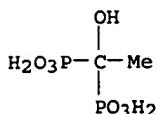
RL: TEM (Technical or engineered material use); USES (Uses)

(reducing agent; compns. and methods for removing silver-oxide)

IT 2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid

RL: TEM (Technical or engineered material use); USES (Uses)

(chelating agent; compns. and methods for removing silver-oxide)  
 RN 2809-21-4 HCAPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



IT 7429-90-5, Aluminum, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (reducing agent; compns. and methods for removing silver-oxide)  
 RN 7429-90-5 HCAPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

L74 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:924299 HCAPLUS  
 DN 138:8249  
 ED Entered STN: 05 Dec 2002  
 TI Use of arylsulfatase inhibitors in deodorants and antiperspirants  
 IN Banowski, Bernhard; Hoffmann, Daniele; Wadle, Armin; Siegert, Petra;  
 Saettler, Andrea; Gerke, Thomas  
 PA Henkel Kgaa, Germany  
 SO Ger. Offen., 22 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM A61K007-32  
 CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10137901	A1	20021205	DE 2001-10137901	20010802
	WO 2001099376	A3	20021121	WO 2001-EP10213	20010905
				W: AU, CZ, EE, HR, HU, IN, LT, LV, NO, NZ, PL, RO, SI, SK, UA RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR	
PRAI	DE 2001-10126667	A1	20010601		
	DE 2001-10137901	A	20010802		

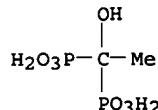
## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 10137901	ICM	A61K007-32	
DE 10137901	ECLA	A61K008/26; A61K008/97; A61Q015/00; A61K008/34; A61K008/34C; A61K008/365; A61K008/368; A61K008/37C; A61K008/4; A61K008/49C2; A61K008/49F; A61K008/49H; A61K008/55; A61K008/60; A61K008/67H; A61K008/67L; A61K008/891;	

OS MARPAT 138:8249  
 AB The invention concerns the use of arylsulfatase inhibitors in deodorants and antiperspirants to decrease body odor caused by decomposition of steroid esters. Deodorant sticks, microemulsion sprays, roll-ons and deodorant tissues are prepared. Thus a water-free deodorant stick included (weight/weight%): silicon oil DC 245 28; Eutanol G16 10; Ucon Fluid AP 5; Cutina HR 6; Lorol C18 20; Eumulgin B3 3; aluminum chlorohydrate 20; talc 8; alpha.-hydroxylauric acid 0.1.  
 ST arylsulfatase inhibitor deodorant antiperspirant  
 IT Carboxylic acids, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (C2-C12 and derivs.; use of arylsulfatase inhibitors in deodorants and antiperspirants)  
 IT Polysiloxanes, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 ((aminoethyl)aminolpropyl hydroxy, di-Me, trimethylsilyl; use of arylsulfatase inhibitors in deodorants and antiperspirants)  
 IT Polysiloxanes, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 ((aminoethyl)aminolpropyl hydroxy, di-Me; use of arylsulfatase

- inhibitors in deodorants and antiperspirants)
- IT Polysiloxanes, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (di-Me, 3-[3-[(3-coco amidopropyl)dimethylammonio]-2-hydroxypropoxy]propyl group-terminated, acetates (salts); use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Alcohols, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (fatty, esters, with sulfuric acid; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Castor oil
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (hydrogenated; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Embryophyta
  - (medicinal plant, exts.; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Amino acids, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (mycosporine-like amino acids; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Citrus junos
  - (oil; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Alcohols, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (polyhydric, C8-C9 and derivs.; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Alcohols, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (polyhydric, with six functional groups, phosphates of; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Phenols, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (polyphenols, nonpolymeric; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Alkali metals, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (salts with C2-C12 carboxylic acids; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Antiperspirants
  - Camellia japonica
  - Camellia sinensis
    - Deodorants
    - Deodorants (personal)
  - Ginkgo biloba
  - Ilex paraguariensis
  - Serenoa repens
    - (use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT Flavones
  - Tocopherols
    - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
      - (use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT 7664-93-9, Sulfuric acid, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (esters with C8-C18 fatty alcs.; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT 9016-17-5, Arylsulfatase
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    - (inhibitors; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT 7440-70-2, Calcium, biological studies
  - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
    - (salts with C2-C12 carboxylic acids; use of arylsulfatase inhibitors in deodorants and antiperspirants)
- IT 50-99-7D, D-Glucose, disodium coco derivs. 56-65-5, Adenosine triphosphate, biological studies 60-12-8, 2-Phenylethanol 60-81-1, Phlorizine 69-72-7, Salicylic acid, biological studies 77-92-9D, Citric acid, disodium cocopolyglucose derivs. 83-86-3, Phytic acid 87-69-4D, disodium cocopolyglucose derivs. 108-95-2D, Phenol, derivs. 112-92-5, Lorol C18 117-39-5D, Quercetin, glucosyl derivs. 122-99-6, Phenoxyethanol 123-76-2, Levulinic acid 139-12-8, Aluminum acetate 153-18-4, Rutin 331-39-5, Caffeic acid 480-35-3, Eriodictin 482-35-9, Isoquercetin 499-44-5, Hinokitiol 520-26-3, Hesperidin 520-27-4, Diosmin 529-44-2D, Myricetin, glucosyl derivs. 533-75-5D, derivs. 541-02-6, Cyclopentasiloxane, decamethyl- 557-34-6, Zinc

acetate 617-73-2, .alpha.-Hydroxycaprylic acid 1327-41-9,  
 Aluminum chlorohydrate 1343-98-2D, Silicic acid, ester  
 2809-21-4, Etidronic acid 2984-55-6, .alpha.-Hydroxylauric acid  
 4468-02-4, Zinc gluconate 5393-81-7, .alpha.-Hydroxydecanoic acid  
 6485-39-8, Manganese gluconate 7085-55-4, Troxerutin 7429-90-5D  
 , Aluminum, salts with C2-C12 carboxylic acids 7439-95-4D,  
 Magnesium, salts with C2-C12 carboxylic acids 7439-96-5D, Manganese,  
 salts with C2-C12 carboxylic acids 7440-66-6D, Zinc, salts with C2-C12  
 carboxylic acids 10236-47-2, Naringin 13241-33-3, Neohesperidin  
 13682-92-3 15454-75-8, Zinc L-pyroglutamate 18312-25-9, Magnesium,  
 (D-gluconato-O1,O2) (D-glycero-D-gluco-heptonato-O1,O2)-, (T-4)-  
 18604-50-7, Eugenylglucoside 20283-92-5, Rosemary acid 20702-77-6,  
 Neohesperidindihydrochalcone 21145-77-7, 7-Acetyl-1,1,3,4,4,6-  
 hexamethyltetralin 23869-24-1, Monoxerutin 29923-31-7, Sodium lauroyl  
 N-glutamate 35057-12-6 38517-23-6, Sodium stearoyl N-glutamate  
 52250-43-8 60007-93-4, D-Gluconic acid, aluminum salt (3:1)  
 71368-20-2, Sodium myristoyl N-glutamate 110225-00-8, Eutanol G16  
 119291-09-7 119291-12-2 128197-63-7 129499-78-1, L-Ascorbic acid,  
 2-O-.alpha.-D-glucopyranosyl- 130603-71-3, .alpha.-Glucosylrutin  
 477251-72-2 477251-73-3  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (use of arylsulfatase inhibitors in deodorants and antiperspirants)  
 IT 2809-21-4, Etidronic acid 7429-90-5D, Aluminum  
 , salts with C2-C12 carboxylic acids  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (use of arylsulfatase inhibitors in deodorants and antiperspirants)  
 RN 2809-21-4 HCPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



RN 7429-90-5 HCPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

L74 ANSWER 11 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:657911 HCPLUS  
 DN 137:190370  
 ED Entered STN: 30 Aug 2002  
 TI Hair relaxer system and method therefor  
 IN Akhter, Humayoun; Syed, Ali N.  
 PA Avlon Industries, Inc., USA  
 SO PCT Int. Appl., 66 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K  
 CC 62-3 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002065982	A2	20020829	WO 2002-US2057	20020123
	WO 2002065982	A3	20030403		
				W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	US 2003049222	A1	20030313	US 2001-783904	20010215
	US 6602493	B2	20030805		
	EP 1368042	A2	20031210	EP 2002-713455	20020123

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 BR 2002007493 A 20040810 BR 2002-7493 20020123  
 PRAI US 2001-783904 A 20010215  
 WO 2002-US2057 W 20020123

## CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002065982 ICM A61K  
 US 2003049222 ECLA A61K008/19; A61K008/26; A61K008/27; A61Q005/00;  
 A61Q005/06

AB This invention describes a hair relaxer system and method that ameliorates and inhibits the adsorption and retention by alkaline, chemical-relaxed hair of exogenous multivalent metal ion present in the chemical relaxer, in the rinse water or both employed during the process of relaxing naturally curly hair with compns. containing strong chemical base. In a preferred relaxer method aspect, the alkaline, chemical relaxed hair was contacted with an aqueous metal ion chelating composition containing at least one multivalent metal ion chelating agent employing a disclosed delivery system adapted for practical salon use. In another preferred relaxer method embodiment, wipes impregnated with multivalent metal ion chelating composition were employed during the relaxer process.

ST hair relaxer chelator metal adsorption inhibitor

IT Chelating agents

(hair relaxer system comprising chelators for inhibition of metal ion retention in hair)

IT Alkaline earth metals

Heavy metals

Transition metals, processes

RL: REM (Removal or disposal); PROC (Process)

(hair relaxer system comprising chelators for inhibition of metal ion retention in hair)

IT Hair preparations

(straighteners; hair relaxer system comprising chelators for inhibition of metal ion retention in hair)

IT 60-00-4, EDTA, biological studies 64-02-8, Tetrasodium EDTA

67-43-6, Diethylenetriaminepentaacetic acid

93-62-9 139-13-9, Nitritotriacetic acid 139-33-3, Disodium EDTA

150-39-0, Hydroxyethylmethylenediaminetriacetic acid 1170-02-1

5835-28-9, N-Hydroxyethylglycine 7408-20-0, Iminodisuccinic acid

20846-91-7 25608-40-6, Polyaspartic acid 26063-13-8, Polyaspartic acid

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair relaxer system comprising chelators for inhibition of metal ion retention in hair)

IT 7429-90-5, Aluminum, processes 7439-89-6, Iron,

processes 7439-92-1, Lead, processes 7439-95-4, Magnesium, processes

7439-96-5, Manganese, processes 7440-02-0, Nickel, processes

7440-24-6, Strontium, processes 7440-39-3, Barium, processes

7440-50-8, Copper, processes 7440-66-6, Zinc, processes 7440-70-2,

Calcium, processes

RL: REM (Removal or disposal); PROC (Process)

(hair relaxer system comprising chelators for inhibition of metal ion retention in hair)

IT 67-43-6, Diethylenetriaminepentaacetic acid

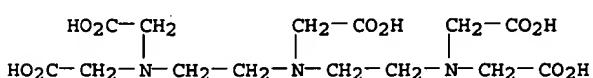
1170-02-1

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair relaxer system comprising chelators for inhibition of metal ion retention in hair)

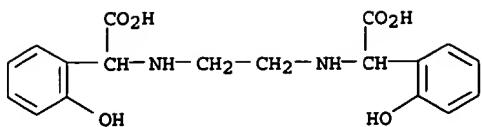
RN 67-43-6 HCPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 1170-02-1 HCPLUS

CN Benzeneacetic acid, .alpha., .alpha.'-(1,2-ethanediylidimino)bis[2-hydroxy- (9CI) (CA INDEX NAME)



IT 7429-90-5, Aluminum, processes  
 RL: REM (Removal or disposal); PROC (Process)  
 (hair relaxer system comprising chelators for inhibition of metal ion  
 retention in hair)  
 RN 7429-90-5 HCPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

L74 ANSWER 12 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:396433 HCPLUS  
 DN 136:391080  
 ED Entered STN: 28 May 2002  
 TI Antibacterial deodorant compositions for sanitary protection  
 IN Ito, Naoaki; Honda, Hidenobu; Saito, Koichi; Urabe, Shinji; Uemura,  
 Masayoshi  
 PA Toray Industries, Inc., Japan; Nagase Chemtx Corp.  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM A61L009-00  
 ICS A01N037-44; A61L009-01; A61L002-16  
 CC 63-7 (Pharmaceuticals)  
 Section cross-reference(s): 40

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002153545	A2	20020528	JP 2000-353252	20001120
PRAI JP 2000-353252		20001120		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002153545	ICM	A61L009-00
	ICS	A01N037-44; A61L009-01; A61L002-16

AB The compns., useful for disposable diapers, etc., contain porous substances, aminopolycarboxylic acids, and metals. A polyester fabric was impregnated with an aqueous composition containing Al silicate, diethylenetriaminepentaacetic acid, and TiO2 and dry-cured. The fabric showed antibacterial activity against methicillin-susceptible and -resistant *Staphylococcus aureus* and 100% removal of NH3 and MeSH from air, and reduced histamine-induced itch in human skin.

ST antibacterial deodorant disposable diaper aminopolycarboxylate metal; aluminum silicate diethylenetriaminetetraacetate titania deodorant diaper; porous substance aminopolycarboxylate deodorant disposable diaper

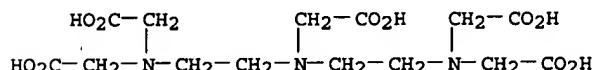
IT Adsorbents  
 Antibacterial agents  
 Deodorants  
 Disposable diapers  
 Porous materials  
 Textiles

(antibacterial deodorant compns. containing porous substances, aminopolycarboxylic acids, and metals for sanitary protection)

IT Aluminosilicates, biological studies  
 Bentonite, biological studies  
 Metals, biological studies  
 Zeolites (synthetic), biological studies  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (antibacterial deodorant compns. containing porous substances, aminopolycarboxylic acids, and metals for sanitary protection)

IT Polyester fibers, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fabrics; antibacterial deodorant compns. containing porous substances,

aminopolycarboxylic acids, and metals for sanitary protection)  
 IT Amino acids, biological studies  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polycarboxylic; antibacterial deodorant compns. containing porous substances, aminopolycarboxylic acids, and metals for sanitary protection)  
 IT 60-00-4, Ethylenediaminetetraacetic acid, biological studies  
 67-43-6, Diethylenetriaminepentaacetic acid  
 1314-13-2, Zinc oxide, biological studies 1335-30-4, Aluminum silicate 7429-90-5, Aluminum, biological studies  
 7439-89-6, Iron, biological studies 7440-21-3, Silicon, biological studies 7440-22-4, Silver, biological studies 7440-32-6, Titanium, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7440-67-7, Zirconium, biological studies 7758-98-7, Copper sulfate, biological studies 13463-67-7, Titanium oxide, biological studies  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (antibacterial deodorant compns. containing porous substances, aminopolycarboxylic acids, and metals for sanitary protection)  
 IT 67-43-6, Diethylenetriaminepentaacetic acid  
 7429-90-5, Aluminum, biological studies  
 7440-67-7, Zirconium, biological studies  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (antibacterial deodorant compns. containing porous substances, aminopolycarboxylic acids, and metals for sanitary protection)  
 RN 67-43-6 HCAPLUS  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 7429-90-5 HCAPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

RN 7440-67-7 HCAPLUS  
 CN Zirconium (8CI, 9CI) (CA INDEX NAME)

Zr

L74 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:181872 HCAPLUS  
 DN 137:158616  
 ED Entered STN: 14 Mar 2002  
 TI Characteristics of grey wastewater  
 AU Eriksson, Eva; Auffarth, Karina; Henze, Mogens; Ledin, Anna  
 CS Environment & Resources DTU, Technical University of Denmark, Kgs. Lyngby, DK-2800, Den.  
 SO Urban Water (2002), 4(1), 85-104  
 CODEN: URWAF; ISSN: 1462-0758  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 CC 60-5 (Waste Treatment and Disposal)  
 AB The composition of gray wastewater depends on sources and installations from where the water is drawn, e.g. kitchen, bathroom or laundry. The chemical compds. present originate from household chems., cooking, washing and the piping. In general gray wastewater contains lower levels of organic matter and nutrients compared to ordinary wastewater, since urine, feces and toilet paper are not included. The levels of heavy metals are, however, in the same concentration range. The information regarding the content of xenobiotic organic compds. (XOCs) is limited. In this study, 900 XOCs were identified as potentially present in gray wastewater by the use of tables

of contents of household chemical products.

ST gray wastewater compn

IT Detergents  
(anionic; characteristics of gray wastewater)

IT Quaternary ammonium compounds, occurrence  
RL: POL (Pollutant); OCCU (Occurrence)  
(bis(hydrogenated tallow alkyl)dimethyl, chlorides; characteristics of gray wastewater)

IT Detergents  
(cationic; characteristics of gray wastewater)

IT Alkalinity

Coliform bacteria

Detergents

Dyes

Electric conductivity

Emulsifying agents

Eubacteria

Giardia

Odor and Odorous substances

Preservatives

Softening agents

Solvents

Wastewater  
(characteristics of gray wastewater)

IT Chlorides, occurrence

Cyanides (inorganic), occurrence

Enzymes, occurrence

Fatty acids, occurrence

Fluorides, occurrence

Heavy metals

Nitrates, occurrence

Nitrites

Organic compounds, occurrence

Phosphates, occurrence

Sulfates, occurrence  
RL: POL (Pollutant); OCCU (Occurrence)  
(characteristics of gray wastewater)

IT Fatty acids, occurrence  
RL: POL (Pollutant); OCCU (Occurrence)  
(esters, Me esters, .alpha.-sulfo-; characteristics of gray wastewater)

IT Sulfonic acids, occurrence  
RL: POL (Pollutant); OCCU (Occurrence)  
(salts of alkene; characteristics of gray wastewater)

IT 36574-66-0D, N-coco acyl derivs.  
RL: POL (Pollutant); OCCU (Occurrence)  
(betaines, coco amidopropyl, acyl derivs.; characteristics of gray wastewater)

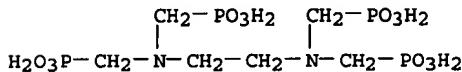
IT 52-51-7, Bronopol 67-63-0, Isopropanol, occurrence 84-66-2,  
Diethylphthalate 84-74-2, Dibutylphthalate 90-04-0, o-Anisidine  
91-94-1, 3,3'-Dichlorobenzidine 92-87-5, Benzidine 97-56-3,  
o-Aminoazotoluene 100-42-5, Styrene, occurrence 101-14-4,  
4,4'-Methylenebis(2-chlorobenzenamine) 101-86-0, Hexyl cinnamic aldehyde  
106-44-5, p-Cresol, occurrence 107-13-1, 2-Propene nitrile, occurrence  
107-64-2 108-46-3, Benzene-1,3-diol, occurrence 108-95-2, Phenol,  
occurrence 111-42-2, Diethanolamine, occurrence 112-02-7,  
N-Hexadecyltrimethyl ammonium chloride 117-81-7, Bis(2-  
ethylhexyl)phthalate 120-82-1, 1,2,4-Trichlorobenzene 139-13-9,  
Nitrilotriacetic acid 141-43-5, Ethanolamine, occurrence 142-82-5,  
Heptane, occurrence 1222-05-5, HHCB 1330-20-7, Xylene, occurrence  
1429-50-1 3380-34-5, Triclosan 4080-31-3, Quaternium-15  
7398-69-8, DADMAC 7429-90-5, Aluminum, occurrence  
7439-89-6, Iron, occurrence 7439-92-1, Lead, occurrence 7439-95-4,  
Magnesium, occurrence 7439-96-5, Manganese, occurrence 7439-97-6,  
Mercury, occurrence 7440-02-0, Nickel, occurrence 7440-09-7,  
Potassium, occurrence 7440-21-3, Silicon, occurrence 7440-22-4,  
Silver, occurrence 7440-23-5, Sodium, occurrence 7440-38-2, Arsenic,  
occurrence 7440-39-3, Barium, occurrence 7440-42-8, Boron, occurrence  
7440-43-9, Cadmium, occurrence 7440-47-3, Chromium, occurrence  
7440-48-4, Cobalt, occurrence 7440-50-8, Copper, occurrence 7440-66-6,  
Zinc, occurrence 7440-70-2, Calcium, occurrence 7704-34-9, Sulfur,  
occurrence 7782-49-2, Selenium, occurrence 14798-03-9, Ammonium,  
occurrence 21145-77-7, AHTN 26172-55-4, 5-Chloro-2-methyl-4-  
isothiazolin-3-one 28553-12-0, Diisonylphthalate 30007-47-7,  
Bronidox 39236-46-9, Imidazolidinyl urea  
RL: POL (Pollutant); OCCU (Occurrence)  
(characteristics of gray wastewater)

RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD

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 IT 1429-50-1 7429-90-5, Aluminum, occurrence  
 RL: POL (Pollutant); OCCU (Occurrence)  
 (characteristics of gray wastewater)  
 RN 1429-50-1 HCPLUS  
 CN Phosphonic acid, [1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis- (9CI)  
 (CA INDEX NAME)



RN 7429-90-5 HCPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

L74 ANSWER 14 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:661220 HCPLUS  
 DN 135:215751  
 ED Entered STN: 10 Sep 2001  
 TI Hair relaxer compositions containing complexing agent activators  
 IN Van Nguyen, Nghi; Cannell, David W.  
 PA L'oreal, Fr.  
 SO PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K007-06  
 CC 62-3 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001064171	A2	20010907	WO 2001-US6338	20010228
	WO 2001064171	A3	20020110		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6562327	B1	20030513	US 2000-516942	20000301
	CA 2401009	AA	20010907	CA 2001-2401009	20010228
	EP 1261312	A2	20021204	EP 2001-916273	20010228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001008907	A	20021224	BR 2001-8907	20010228
	JP 2003524658	T2	20030819	JP 2001-563069	20010228
	ZA 2002006840	A	20030404	ZA 2002-6840	20020827
PRAI	US 2000-516942	A	20000301		
	WO 2001-US6338	W	20010228		

CLASS  
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2001064171 ICM A61K007-06  
 US 6562327 ECLA A45D007/04; A61K007/09; A61K007/09K  
 AB The present invention provides a composition for lanthionizing keratin fibers comprising at least 1 multivalent metal hydroxide and at least 1 complexing agent effective for dissociating one multivalent metal hydroxide in sufficient quantity to effect lanthionization of the keratin fibers. In one embodiment, the complex that is formed between the complexing agent and a metal ion from the multivalent metal hydroxide is soluble in water. thus, a gel was prepared from mineral oil 15.0, petrolatum 5.5, Sr(OH)2 octahydrate 18.6, propylene glycol 3.0, acrylates/Ceteth-20 itaconate copolymer 7.0, and water 50.9%. The relaxer gel (6 g) was mixed

with a solution of 1.83 g tetrasodium EDTA in 2 g water and the mixture was applied to kinky hair. The relaxing efficiency of the strontium/EDTA hair relaxer was found to be in excess of 85%.

ST hair relaxer complexing agent; hydroxide EDTA hair relaxer

IT Ion exchangers  
(hair relaxer compns. containing complexing agent activators)

IT Amino acids, biological studies

Crown ethers

Hydroxides (inorganic)

Silicates, biological studies

Sulfonic acids, biological studies

Zeolite-group minerals

Zeolites (synthetic), biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(hair relaxer compns. containing complexing agent activators)

IT Carboxylic acids, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(hydroxy; hair relaxer compns. containing complexing agent activators)

IT Hair preparations  
(straighteners; hair relaxer compns. containing complexing agent activators)

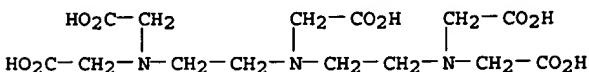
IT 60-00-4, EDTA, biological studies 67-43-6;  
Diethylenetriaminepentaacetic acid 77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid, biological studies 93-62-9, N-(2-Hydroxyethyl)iminodiacetic acid 139-13-9 139-89-9, Trisodium N-(hydroxyethyl)ethylenediaminetriacetate 140-01-2, Pentasodium diethylenetriaminepentaacetate 150-39-0, N-(Hydroxyethyl)ethylenediaminetriacetic acid 1305-62-0, Calcium hydroxide (Ca(OH)2), biological studies 1309-42-8, Magnesium hydroxide 1318-10-1, Analcime 1318-50-9, Epistilbite 1318-63-4, Heulandite 1318-80-5, Laumontite 1318-83-8, Levynite 1318-95-2, Natrolite 1319-20-6, Scolecite 1327-36-2, Aluminosilicate 1763-07-1, Guanidine phosphate 2235-43-0 5064-31-3, Trisodium Nitrilotriacetate 6419-19-8, Aminotrimethylene phosphonic acid 6834-92-0, Sodium metasilicate 7408-20-0, Iminodisuccinic acid 7601-54-9, Trisodium phosphate 7778-53-2, Tripotassium phosphate 10006-28-7, Silicic acid (H2SiO3), dipotassium salt 12043-66-2, Mesolite 12173-28-3, Faujasite 12173-98-7, Mordenite 12174-18-4, Phillipsite 12197-41-0, Brewsterite 12251-23-9, Gismondine 12251-32-0, Chabazite 12251-35-3, Gmelinite 12251-39-7, Harmotome 12252-36-7, Edingtonite 12399-54-1, Thomsonite 12446-28-5, Stilbite 17194-00-2, Barium hydroxide (Ba(OH)2) 18480-07-4, Strontium hydroxide (Sr(OH)2) 18933-05-6, Manganese hydroxide (Mn(OH)2) 20427-58-1, Zinc hydroxide (Zn(OH)2) 20427-59-2, Copper hydroxide (Cu(OH)2) 21041-93-0, Cobalt hydroxide (Co(OH)2) 21645-51-2, Aluminum hydroxide (Al(OH)3), biological studies 120070-48-6 126853-99-4, Molybdenum hydroxide 148124-41-8 148124-42-9  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(hair relaxer compns. containing complexing agent activators)

IT 64-02-8, Tetrasodium EDTA 1311-10-0, Strontium hydroxide octahydrate  
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(hair relaxer compns. containing complexing agent activators)

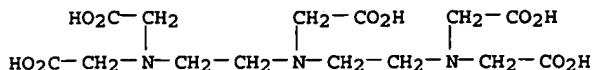
IT 67-43-6, Diethylenetriaminepentaacetic acid 140-01-2, Pentasodium diethylenetriaminepentaacetate  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(hair relaxer compns. containing complexing agent activators)

RN 67-43-6 HCPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 140-01-2 HCPLUS  
CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, pentasodium salt (8CI, 9CI) (CA INDEX NAME)



● 5 Na

H<sub>2</sub>O

L74 ANSWER 15 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:300511 HCPLUS  
 DN 134:315855  
 ED Entered STN: 27 Apr 2001  
 TI Antimicrobial compositions comprising pyroglutamic acid and metal salts  
 IN Biedermann, Kimberly Ann; Kronholm, Kurt Glen; Beerse, Peter William;  
 Morgan, Jeffrey Michael; Mobley, Michael Joseph  
 PA The Procter & Gamble Company, USA  
 SO PCT Int. Appl., 69 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-195  
 ICS A01N037-46  
 CC 62-1 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 10, 46, 63  
 FAN.CNT 26

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001028552	A2	20010426	WO 2000-US28922	20001019
	WO 2001028552	A3	20010614		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2382985	AA	20010426	CA 2000-2382985	20001019
	BR 2000014778	A	20020716	BR 2000-14778	20001019
	EP 1225887	A2	20020731	EP 2000-970995	20001019
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	TR 200201048	T2	20020821	TR 2002-200201048	20001019
	JP 2003512323	T2	20030402	JP 2001-531382	20001019
	ZA 2002002475	A	20030627	ZA 2002-2475	20020327
PRAI	US 1999-421131	A	19991019		
	WO 2000-US28922	W	20001019		

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2001028552	ICM	A61K031-195
		ICS	A01N037-46

AB: The present invention relates to antimicrobial compns. which provide enhanced immediate as well as residual anti-viral and antibacterial efficacy. The antimicrobial compns. of the present invention provide previously unseen residual effectiveness against Gram neg. bacteria, Gram pos. bacteria, and viruses, fungi, and improved immediate germ reduction upon use. These compns. comprise: (a) a safe and effective amount of pyroglutamic acid; (b) a safe and effective amount of a metal salt; and (c) a dermatol. acceptable carrier for the acid and salt, wherein said composition has a pH of 1-7. The invention further relates to methods of use for the present compns. as well as antimicrobial products which incorporate the compns. For example, a foaming facial, hand or body wash suitable for washing the skin is prepared from the following ingredients using conventional mixing techniques: (A) sodium myristoyl sarcosinate 1.35%, disodium lauroamphoacetate 0.35%, sodium trideceth sulfate 0.35%, lauroamphoacetate 1.85%, PEG 120 Me glucose dioleate 2.7%, glycerin 2%; (B) dimethicone copolyol 1.3%, PEG 6 caprylic/capric glycerides 1%, phenoxyisopropanol 0.72%, Polyquaternium-10 0.5%, pyroglutamic acid 2.0%, Cuivridone 0.5%, CuCl<sub>2</sub> 0.1%, disodium EDTA 0.1%, glycol distearate 0.6%, sodium laureth sulfate 0.6%, cocamide MEA 0.12%, Laureth-10 0.12%, PEG 150 pentaerythritol tetrastearate 0.9%, fragrance 0.2%; and (C) water up to

100%, resp.

ST pyroglutamate salt topical antimicrobial cosmetic cleaning; disinfectant  
topical pyroglutamate salt cosmetic cleaning

IT Amine oxides  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C12-16-alkyldimethyl; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C16-18, ethoxylated, ceteareth; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Glycerides, biological studies  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C8-10, ethoxylated; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Sulfonic acids, biological studies  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkene, C14-16-; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Quaternary ammonium compounds, biological studies  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkylbenzyldimethyl, chlorides; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Shampoos  
(antidandruff; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Antibacterial agents  
Antimicrobial agents  
Antiviral agents  
Common cold  
Disinfectants  
Fungicides  
Gram-negative bacteria  
Gram-positive bacteria (Firmicutes)  
Mouthwashes  
Rhinovirus  
Scouring agents  
Surfactants  
(antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Alcohols, biological studies  
Amine oxides  
Betaines  
Carboxylic acids, biological studies  
Polyoxyalkylenes, biological studies  
Salts, biological studies  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Soaps  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Bath preparations  
(body washes; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Essential oils  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(clove; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Amides, biological studies  
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco, N-(hydroxyethyl), cocamide MEA; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Respiratory tract  
(disease; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Detergents  
(dishwashing; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Essential oils  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (eucalyptus; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Waxes  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (floor; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Drugs  
 (gastrointestinal; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Bath preparations  
 Cosmetics  
 (gels; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Cosmetics  
 (hand sanitizers; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Cosmetics  
 (lotions; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Cosmetics  
 (moisturizers; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Drug delivery systems  
 (nasal sprays; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Polysiloxanes, biological studies  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polyether-; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Polyethers, biological studies  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (siloxane-; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Drug delivery systems  
 (solns., topical; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Essential oils  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (thyme, Thymus vulgaris, thyme oil; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Paper  
 (tissue, facial; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT Medical goods  
 (wipes; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 15454-74-7, Cuivridone  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Cuivridone; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 556-67-2, DC 344  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (DC 344; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 128285-85-8, Dow Corning 580  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Dow Corning 580; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 2216-51-5, Levomenthol  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Levomenthol; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 158050-37-4, Dow Corning Q 2-1401  
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Q 2-1401; antimicrobial compns. comprising pyroglutamic acid and metal salts)

salts)

IT 50-70-4, Sorbitol, biological studies 57-11-4, Stearic acid, biological studies 57-13-6, Urea, biological studies 57-55-6, Propylene Glycol, biological studies 58-95-7, Tocopheryl Acetate 64-02-8, Tetrasodium EDTA 64-17-5, Ethanol, biological studies 67-43-6, DTPA 67-63-0, Isopropanol, biological studies 69-72-7, Salicylic Acid, biological studies 79-10-7D, Acrylic acid, esters, polymers 81-13-0, Panthenol 88-04-0, p-Chloro-m-xylenol 90-43-7, o-Phenylphenol 98-79-3, Pyroglutamic acid 98-92-0, Niacinamide 102-71-6, Triethanolamine, biological studies 110-63-4, Butylene Glycol, biological studies 112-92-5, Stearyl Alcohol 118-55-8, Phenylsalicylate 122-99-6, Phenoxyethanol 139-44-6, Trihydroxystearin 142-91-6, Isopropyl palmitate 532-32-1, Sodium Benzoate 540-10-3, Cetyl palmitate 676-46-0, Sodium malate 770-35-4, Phenoxyisopropanol 994-36-5, Sodium Citrate 1191-50-0, Sodium myristyl sulfate 2235-54-3, Ammonium lauryl sulfate 2809-21-4, HEDP 3380-34-5, Triclosan 5466-77-3, Parsol MCX 7149-65-7, L-Pyroglutamic acid ethyl ester 7439-89-6D, Iron, salts, biological studies 7440-02-0D, Nickel, salts, biological studies 7440-22-4D, Silver, salts, biological studies 7447-39-4, Copper(II) chloride, biological studies 7631-86-9, Silica, biological studies 7646-85-7, Zinc chloride (ZnCl<sub>2</sub>), biological studies 7647-14-5, Sodium chloride, biological studies 7664-93-9D, Sulfuric acid, alkyl esters, biological studies 7705-08-0, Iron(III) chloride, biological studies 7722-84-1, Hydrogen peroxide, biological studies 7758-98-7, Copper sulfate, biological studies 7761-88-8, Silver nitrate, biological studies 7772-99-8, Tin chloride (SnCl<sub>2</sub>), biological studies 7786-81-4, Nickel(II) sulfate 9002-92-0, Laureth 10 9003-39-8, Luviskol K 17 9004-53-9, Dextrin 9004-64-2, Hydroxypropyl cellulose 9006-65-9, Dimethicone 9087-61-0, Aluminum Starch Octenyl Succinate 10028-22-5, Iron(III) sulfate 11138-66-2, Xanthan gum 13463-41-7, Pyrithione zinc 14350-97-1 15214-89-8 15435-29-7, Bromochlorophene 15827-60-8, DETPMP 18641-57-1, Syncrowax HRC 24937-16-4, Nylon-12 25038-74-8 25265-71-8, Dipropylene glycol 25301-02-4, Tyloxapol 25322-68-3, Polyethylene glycol 26027-38-3, Nonoxynol 14 30364-51-3, Sodium myristoyl sarcosinate 32612-48-9, Ammonium Laureth-3 Sulfate 36653-82-4, Cetyl Alcohol 39421-75-5, Jaguar HP 120 42233-14-7, Arachidyl Behenate 54116-08-4, Sodium trideceth sulfate 60908-77-2, Isohexadecane 67167-59-3, Polyethylene glycol stearate 81859-24-7, Polyquaternium 10 84861-79-0, Palmityl potassium phosphate 89382-86-5, Bentone EW 104365-77-7 125018-88-4, Glydant Plus 130249-48-8, Polyethylene glycol pentaerythritol tetrastearate 134499-37-9, Carbopol 954 138789-85-2, Pemulen TR1 156028-14-7, Sodium lauroamphoacetate 286384-03-0, Dow Corning QZ 3225C 335383-60-3, Aristoflex AVC

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 9003-05-8D, crosslinked 148093-12-3, Sepigel 305

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 13463-67-7, Titanium dioxide, biological studies

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(silane-treated; antimicrobial compns. comprising pyroglutamic acid and metal salts)

IT 67-43-6, DTPA 2809-21-4, HEDP

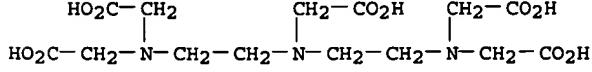
15827-60-8, DETPMP

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antimicrobial compns. comprising pyroglutamic acid and metal salts)

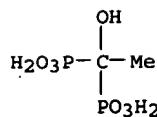
RN 67-43-6 HCPLUS

CN Glycine, N,N-bis[2- {bis(carboxymethyl)amino}ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)

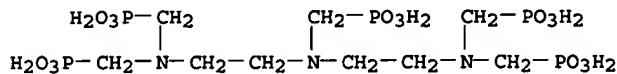


RN 2809-21-4 HCPLUS

CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



RN 15827-60-8 HCAPLUS  
 CN Phosphonic acid, [([(phosphonomethyl)imino]bis[2,1-  
 ethanediyl]nitrilobis(methylene)])]tetrakis- (9CI) (CA INDEX NAME)



L74 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:686242 HCAPLUS  
 DN 133:256574  
 ED Entered STN: 29 Sep 2000  
 TI Cosmetic compositions having an aqueous phase containing  
 L-2-oxothiazolidine-4-carboxylic acid  
 IN Chevalier, Veronique; Quest, Melanie  
 PA L'oreal, Fr.  
 SO Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA French  
 IC ICM A61K007-06  
 ICS A61K007-48  
 CC 62-4 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1038515	A1	20000927	EP 2000-400495	20000223
	EP 1038515	B1	20040714		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2790953	A1	20000922	FR 1999-3476	19990319
	FR 2790953	B1	20020809		
	AT 270869	E	20040715	AT 2000-400495	20000223
	US 6337077	B1	20020108	US 2000-522106	20000309
	BR 2000000707	A	20010502	BR 2000-707	20000313
	JP 2000281521	A2	20001010	JP 2000-74821	20000316
	CN 1267507	A	20000927	CN 2000-104337	20000317
	US 2003004197	A1	20030102	US 2001-2959	20011205
PRAI	FR 1999-3476	A	19990319		
	US 2000-522106	A1	20000309		

CLASS  
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

EP 1038515	ICM A61K007-06 ICS A61K007-48		
EP 1038515	ECLA A61K007/06C14; A61K007/48C14		
FR 2790953	ECLA A61K007/06C14; A61K007/48C14		
US 6337077	ECLA A61K007/06C14; A61K007/48C14		
US 2003004197	ECLA A61K007/06C14; A61K007/48C14		
AB	Cosmetic compns. having an aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid (I), a sequestering agent, and a neutralizing agent to make the pH of the composition to 5-8 are disclosed. A cosmetic emulsion contained cyclohexasiloxane 10, apricot oil 6, glycerin 5, aluminum starch crosslinked by octenylsuccinate 3, stearyl alc. and ceteareth-20 2, methylglucose sesquistearate 2, triethanolamine 1.1, I 1, preservative 0.6, xanthan gum 0.25, disodium EDTA 0.05, and water 69%.		
ST	cosmetic oxothiazolidine carboxylic acid sequestering agent		
IT	Surfactants (amphoteric, disodium cocoamphodiacetate; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)		
IT	Cosmetics (antiaging; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)		
IT	Amino acids, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES		

(Uses)  
 (basic; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Alopecia  
 Sequestering agents  
 Sunscreens  
 Thickening agents  
 pH  
 (cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Alkali metal hydroxides  
 Vitamins  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Skin, disease  
 (depigmentation, agents for; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Cosmetics  
 (emulsions; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Hair preparations  
 (growth stimulants; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Bases, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (organic; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT Cosmetics  
 (skin-lightening; cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

IT 50-81-7, Ascorbic acid, biological studies 56-87-1, LYSINE, biological studies 60-00-4, Edta, biological studies 67-43-6, salts 68-04-2, Trisodium citrate 74-79-3, ARGININE, biological studies 102-71-6, biological studies 111-42-2, biological studies 139-33-3, Disodium EDTA 141-43-5, biological studies 1310-58-3, Potassiumhydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 1429-50-1, Ethylenediamine tetramethylene phosphonic acid 2001-94-7, Dipotassium edta 2809-21-4, Etidronic acid 2809-21-4D, Etidronic acid, salts 3794-83-0, Tetrasodium Etidronate 5064-31-3 6284-40-8, N-Methylglucamine 7651-99-2, Pentasodium ethylenediamine tetramethylene phosphonate 7664-41-7, Ammonia, biological studies 19771-63-2, L-2-Oxothiazolidine-4-carboxylic acid 31138-65-5 52722-52-8 68155-78-2, Heptasodium Diethylenetriamine pentamethylene phosphonate 296269-32-4, Pentasodium Diethylenetriamine tetramethylene phosphonate  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

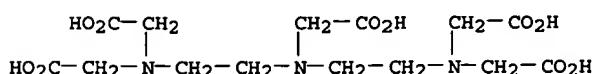
RE

- (1) Free Radical Sciences; EP 0650725 A 1995 HCPLUS
- (2) Free Radical Sciences; EP 0656201 A 1995 HCPLUS
- (3) L 'Oreal; EP 0780120 A 1997 HCPLUS
- (4) L 'Oreal; FR 2773323 A 1999 HCPLUS

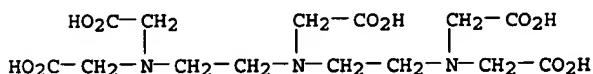
IT 67-43-6 67-43-6D, salts 1429-50-1, Ethylenediamine tetramethylene phosphonic acid 2809-21-4, Etidronic acid 2809-21-4D, Etidronic acid, salts 3794-83-0, Tetrasodium Etidronate  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (cosmetic compns. having aqueous phase containing L-2-oxothiazolidine-4-carboxylic acid)

RN 67-43-6 HCPLUS

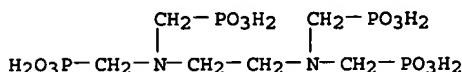
CN Glycine, N,N-bis[2-(bis(carboxymethyl)amino)ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)



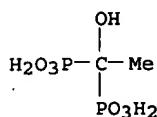
RN 67-43-6 HCAPLUS  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)



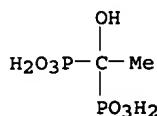
RN 1429-50-1 HCAPLUS  
 CN Phosphonic acid, [1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis- (9CI)  
 (CA INDEX NAME)



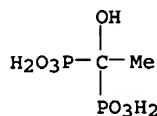
RN 2809-21-4 HCAPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



RN 2809-21-4 HCAPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



RN 3794-83-0 HCAPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis-, tetrasodium salt (9CI) (CA  
 INDEX NAME)



4 Na

L74 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:316928 HCAPLUS  
 DN 132:339056  
 ED Entered STN: 16 May 2000  
 TI Skin preparations for UV-induced rough skin and skin pigmentation  
 IN Kondo, Chiharu; Takayama, Akemi; Senoo, Masami  
 PA Kosei Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM A61K007-48  
 ICS A61K007-00; A61K007-42; A61P017-00  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 63  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2000136123	A2	20000516	JP 1998-307680	19981028
PRAI	JP 1998-307680		19981028		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2000136123	ICM	A61K007-48
	ICS	A61K007-00; A61K007-42; A61P017-00

AB Skin prepns. for UV-induced rough skin and skin pigmentation comprise (A) metal chelators, (B) UV protectants and (C) active oxygen scavengers and/or antioxidants. An ointment contained stearic acid 18, cetanol 4, triethanolamine 2, di-Na EDTA 0.02, homomenthyl salicylate 1, .alpha.-glycosylretin 0.001 and purified water to 100 %.

ST ointment chelator UV protectant antioxidant; UV rough skin cosmetic; skin pigmentation cosmetic

IT Scavengers  
(active oxygen; skin prepns. for UV-induced rough skin and skin pigmentation)

IT Skin, disease  
(pigmentation; skin prepns. for UV-induced rough skin and skin pigmentation)

IT Skin, disease  
(rough skin; skin prepns. for UV-induced rough skin and skin pigmentation)

IT Antioxidants  
Chelating agents  
Cosmetics  
UV stabilizers  
(skin prepns. for UV-induced rough skin and skin pigmentation)

IT Ferritins  
Lactoferrins  
Transferrins  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(skin prepns. for UV-induced rough skin and skin pigmentation)

IT Polyphosphoric acids  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(sodium salts; skin prepns. for UV-induced rough skin and skin pigmentation)

IT 50-81-7, Vitamin c, biological studies 57-88-5, Cholesterol, biological studies 60-00-4, Edta, biological studies 66-71-7, o-Phenanthroline 67-43-6, Diéthilenetriaminepentaacetic acid 69-65-8, Mannitol 69-72-7, Salicylic acid, biological studies 70-51-9, Desferrioxamine 71-00-1, Histidine, biological studies 73-22-3, Tryptophan, biological studies 77-92-9, Citric acid, biological studies 83-86-3, Phytic acid 87-28-5, Ethylene glycol salicylate 87-66-1, Pyrogallol 87-69-4, Tartaric acid, biological studies 94-25-7, Butyl p-Aminobenzoate 117-39-5, Quercetin 118-55-8, Phenyl salicylate 118-56-9, Homomenthyl salicylate 118-58-1, Benzyl salicylate 118-60-5, 2-Ethylhexyl salicylate 118-71-8, Maltol 119-36-8, Methyl salicylate 128-37-0, biological studies 131-53-3, 2,2'-Dihydroxy-4-methoxybenzophenone 131-54-4, 2,2'-Dihydroxy-4,4'-dimethoxybenzophenone 131-55-5, 2,2',4,4'-Tetrahydroxybenzophenone 131-56-6, 2,4-Dihydroxybenzophenone 131-57-7, 2-Hydroxy-4-methoxybenzophenone 134-09-8, Menthyl-o-aminobenzoate 136-44-7, Glyceryl p-Aminobenzoate 149-91-7, Gallic acid, biological studies 150-13-0, p-Aminobenzoic acid 153-18-4, Rutin 154-23-4, Catechin, biological studies 331-39-5, Caffeic acid 472-61-7 526-95-4, Gluconic acid 578-36-9, Potassium salicylate 635-65-4, Bilirubin, biological studies 1306-38-3, Cerium oxide, biological studies 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconia, biological studies 1406-16-2, Vitamin d 1406-18-4, Vitamin e 1843-05-6, 2-Hydroxy-4-n-octoxybenzophenone 2050-08-0, Amyl salicylate 2174-16-5, Salicylic acid triethanolamine salt 2440-22-4, 2-[2-Hydroxy-5-methylphenyl]benzotriazole 4065-45-6 5232-99-5, Ethyl-2-cyano-3,3-diphenylacrylate 5466-76-2, Isopropyl P-methoxycinnamate 5466-77-3, 2-Ethylhexyl P-methoxycinnamate 6197-30-4, 2-Ethylhexyl-2-cyano-3,3-diphenylacrylate 6327-79-3, 4-Methoxydibenzoylmethane 6628-37-1 7235-40-7, .beta.-Carotene 7420-86-2, 2-Phenyl-5-methylbenzoxazole 7785-84-4, Sodium metaphosphate 9054-89-1, Superoxide dismutase 11103-57-4, Vitamin a 12001-76-2, Vitamin b 13110-37-7, Amyl p-Aminobenzoate 13463-67-7, Titania, biological studies 25013-16-5, Butylhydroxyanisole 27503-81-7 27538-35-8, Ethyl urocanate 36861-47-9, 3-[4-Methylbenzylidene]camphor 55940-73-3, Dipropylene glycol salicylate 63250-25-9, 4-Isopropylidibenzoylmethane 70356-09-1, 4-tert-Butyl-4'-

methoxydibenzoylmethane 76840-16-9 96436-87-2 120388-98-9  
 126045-00-9, Methyl diisopropylcinnamate 132944-34-4 178949-76-3,  
 P-Methoxyhydrocinnamic acid diethanolamine salt  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

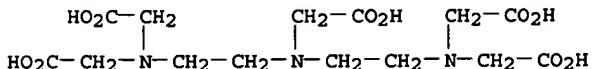
(skin preps. for UV-induced rough skin and skin pigmentation)

IT 67-43-6, Diethylenetriaminepentaacetic acid  
 1314-23-4, Zirconia, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

(skin preps. for UV-induced rough skin and skin pigmentation)

RN 67-43-6 HCAPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 1314-23-4 HCAPLUS  
 CN Zirconium oxide (ZrO<sub>2</sub>) (8CI, 9CI) (CA INDEX NAME)

O—Zr—O

L74 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:120809 HCAPLUS  
 DN 132:171121  
 ED Entered STN: 22 Feb 2000  
 TI Method for discoloration prevention of pigments in pharmaceutical and cosmetic compositions  
 IN Goto, Hajime; Taguchi, Shinya; Iida, Norio  
 PA Lion Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM A61K007-00  
 ICS A61K007-00; A61K047-06  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 62

FAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 ----- ----- ----- -----  
 PI JP 2000053522 A2 20000222 JP 1998-226863 19980811  
 PRAI JP 1998-226863 19980811

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
-----	-----	-----
JP 2000053522	ICM A61K007-00	-----
	ICS A61K007-00; A61K047-06	-----

AB The invention relates to a method for preventing discoloration of pigments in pharmaceutical and cosmetic compns., wherein the discoloration is prevented by the use of an anion-supplying agent having a chelate stability constant with Cu, Fe, or Ni ion (Log KMA)  $\geq$  7 at pH = 3-10 in the compns. An indomethacin ointment (pH = 6.5) containing yellow No.4 0.0001, EDTA.4Na (log KMA = 18.79) 0.02 %, and other ingredients was prepared

ST pharmaceutical cosmetic discoloration prevention anion supplier

IT Discoloration prevention agents

Pigments, biological

Pigments, nonbiological

(discoloration prevention agent containing pigments and anion-supplying agents for pharmaceuticals or cosmetics)

IT Carotenes, biological studies

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

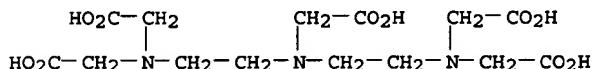
(discoloration prevention agent containing pigments and anion-supplying agents for pharmaceuticals or cosmetics)

IT Cosmetics

Drug delivery systems

(lotions; discoloration prevention agent containing pigments and

anion-supplying agents for pharmaceuticals or cosmetics)  
 IT Drug delivery systems  
 (ointments; discoloration prevention agent containing pigments and  
 anion-supplying agents for pharmaceuticals or cosmetics)  
 IT Blueberry  
 Curcuma  
 Perilla  
 Persimmon (*Diospyros*)  
 Shrimp  
 (pigment; discoloration prevention agent containing pigments and  
 anion-supplying agents for pharmaceuticals or cosmetics)  
 IT Medical goods  
 (poultices; discoloration prevention agent containing pigments and  
 anion-supplying agents for pharmaceuticals or cosmetics)  
 IT 52-90-4, Cysteine, biological studies 56-40-6, Glycine, biological  
 studies 56-86-0, Glutamic acid, biological studies 60-00-4, EDTA,  
 biological studies 64-02-8, EDTA tetrasodium salt 69-72-7, Salicylic  
 acid, biological studies 97-05-2, Sulfosalicylic acid 139-33-3,  
 Disodium ethylenediaminetetraacetate 149-45-1 596-03-2, Japan orange  
 201 928-72-3, Disodium iminodiacetate 1420-46-8, DTPA  
 disodium salt 1436-59-5, cis-1,2-Diaminocyclohexane 1934-21-0, Japan  
 yellow 4 2399-85-1, Tripotassium nitrilotriacetate 2611-82-7, Japan  
 red 102 2783-94-0, Japan yellow 5 3520-42-1, Japan red 106  
 3844-45-9, Japan blue 1 5141-20-8 5657-17-0, EDDA 12225-21-7, Japan  
 yellow 4 aluminum lake 12227-78-0, Japan red 3  
 aluminum lake 13311-39-2, EDTA 15739-09-0 16521-38-3, Japan  
 blue 2 aluminum lake 25956-17-6  
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (discoloration prevention agent containing pigments and anion-supplying  
 agents for pharmaceuticals or cosmetics)  
 IT 1420-46-8, DTPA disodium salt  
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (discoloration prevention agent containing pigments and anion-supplying  
 agents for pharmaceuticals or cosmetics)  
 RN 1420-46-8 HCAPLUS  
 CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, disodium salt (8CI,  
 9CI) (CA INDEX NAME)

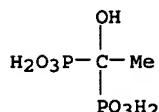


●2 Na

L74 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:535752 HCAPLUS  
 DN 131:248319  
 ED Entered STN: 27 Aug 1999  
 TI Anion-exchange separation and determination of bisphosphonates and related  
 analytes by post-column indirect fluorescence detection  
 AU Lovdahl, Michael J.; Pietrzik, Donald J.  
 CS Parke-Davis Pharmaceuticals, Ann Arbor, MI, 48105, USA  
 SO Journal of Chromatography, A (1999), 850(1 + 2), 143-152  
 CODEN: JCRAEY; ISSN: 0021-9673  
 PB Elsevier Science B.V.  
 DT Journal  
 LA English  
 CC 64-3 (Pharmaceutical Analysis)  
 Section cross-reference(s): 62  
 AB Bisphosphonic acids and their salts can be detected after their liquid  
 chromatog. separation by post-column indirect fluorescence detection (IFD).  
 After separation the analyte is combined with the highly fluorescent Al<sup>3+</sup>-morin  
 (2',3,4',5,7-pentahydroxyflavone) solution and fluorescence decreases because  
 of the formation of the nonfluorescent A<sup>3+</sup>-bisphosphonate complex. The  
 decrease in fluorescence is proportional to the amount of bisphosphonate  
 present. Separation of the multivalent anionic bisphosphonate analytes from  
 other anions and sample matrix is achieved on a strong base anion-  
 exchange column with a strong, basic eluent. The post-column reaction  
 variables, which influence IFD, are identified and optimized for the

detection of the bisphosphonates after separation on the anion exchanger. The method is selective, since only a few anions will undergo a reaction with the Al<sup>3+</sup>-morin solution, and sensitive, detection limit for difluoromethylene bisphosphonate, F2MDP, is 4 ng for S/N=3. The separation-IFD method can be applied to the determination of bisphosphonates, such as F2MDP, ethane-1-hydroxy-1,1-bisphosphonic acid, dichloromethylene bisphosphonic acid, 4-amino-1-hydroxybutane-1,1-bisphosphonic acid, in biol. samples. The separation-IFD method is also applicable to the detection of inositol phosphate anions.

ST bisphosphonate detn anion exchange chromatog fluorometry  
 IT Fluorometry  
 Ion exchange liquid chromatography  
 (fluorometric detection of bisphosphonates using Al<sup>3+</sup>-morin post-column complexation agent after anion-exchange separation)  
 IT 2809-21-4 10596-23-3 10596-32-4 66376-36-1 68247-19-8,  
 Inositol phosphate  
 RL: ANT (Analyte); ANST (Analytical study)  
 (fluorometric detection of bisphosphonates using Al<sup>3+</sup>-morin post-column complexation agent after anion-exchange separation)  
 IT 480-16-0D, Morin, aluminum complexes 7429-90-5D,  
 Aluminum, morin complexes, uses  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (fluorometric detection of bisphosphonates using Al<sup>3+</sup>-morin post-column complexation agent after anion-exchange separation)  
 RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Benedict, J; Diphosphonates and Bone 1982, P1 HCPLUS  
 (2) Bisaz, S; Clin Chim Acta 1975, V65, P299 HCPLUS  
 (3) Burton, D; J Fluorine Chem 1983, V23, P339 HCPLUS  
 (4) Chester, T; J Chromatogr 1981, V225, P17 HCPLUS  
 (5) Daley-Yates, P; J Chromatogr 1989, V490, P329 HCPLUS  
 (6) Edelmuth, S; Thesis University of Iowa 1986  
 (7) Fleisch, H; Clin Orth Rel Res 1987, V217, P72  
 (8) Fleisch, H; Science 1968, V165, P1262  
 (9) Flesch, G; J Chromatogr 1989, V489, P446 HCPLUS  
 (10) Flesch, G; J Chromatogr 1991, V568, P261 HCPLUS  
 (11) Fonong, T; Anal Chem 1983, V55, P1645  
 (12) Forbes, K; Advances in Ion Chromatography 1989, V1, P487  
 (13) Ismail, Z; J Chromatogr 1987, V404, P372 HCPLUS  
 (14) Kline, W; J Chromatogr 1990, V534, P139 HCPLUS  
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 IT 2809-21-4  
 RL: ANT (Analyte); ANST (Analytical study)  
 (fluorometric detection of bisphosphonates using Al<sup>3+</sup>-morin post-column complexation agent after anion-exchange separation)  
 RN 2809-21-4 HCPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



IT 7429-90-5D, Aluminum, morin complexes, uses  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (fluorometric detection of bisphosphonates using Al<sup>3+</sup>-morin post-column  
 complexation agent after anion-exchange separation)  
 RN 7429-90-5 HCAPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

L74 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:207280 HCAPLUS  
 DN 128:275101  
 ED Entered STN: 11 Apr 1998  
 TI Gas and gaseous precursor filled microspheres as topical and subcutaneous  
 delivery vehicles  
 IN Unger, Evan C.; Matsunaga, Terry O.; Yellowhair, David  
 PA Imarx Pharmaceutical Corp., USA  
 SO U.S., 40 pp., Cont.-in-part of U.S. Ser. No. 307,305.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A61K009-127  
 NCL 424450000  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 62

FAN.CNT 21

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5733572	A	19980331	US 1994-346426	19941129
	US 5088499	A	19920218	US 1990-569828	19900820
	WO 9109629	A1	19910711	WO 1990-US7500	19901219
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AT 180170	E	19990615	AT 1991-902857	19901219
	ES 2131051	T3	19990716	ES 1991-902857	19901219
	JP 3309356	B2	20020729	JP 1991-503276	19901219
	JP 05502675	T2	19930513		
	US 5228446	A	19930720	US 1991-717084	19910618
	WO 9222247	A1	19921223	WO 1992-US2615	19920331
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	AU 9220020	A1	19930112	AU 1992-20020	19920331
	AU 667471	B2	19960328		
	JP 06508364	T2	19940922	JP 1993-500847	19920331
	JP 3456584	B2	20031014		
	EP 616508	A1	19940928	EP 1992-912456	19920331
	EP 616508	B1	20010718		
	EP 616508	B2	20040929		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	AT 203148	E	20010815	AT 1992-912456	19920331
	ES 2159280	T3	20011001	ES 1992-912456	19920331
	US 5469854	A	19951128	US 1993-76239	19930611
	US 5580575	A	19961203	US 1993-76250	19930611
	US 5348016	A	19940920	US 1993-88268	19930707
	US 5542935	A	19960806	US 1993-160232	19931130
	US 5585112	A	19961217	US 1993-159687	19931130
	US 5769080	A	19980623	US 1994-199462	19940222
	WO 9428874	A1	19941222	WO 1994-US5633	19940519
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	US 5773024	A	19980630	US 1994-307305	19940916
	CA 2177713	AA	19950608	CA 1994-2177713	19941130
	WO 9515118	A1	19950608	WO 1994-US13817	19941130
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	JP 09506098	T2	19970617	JP 1995-515763	19941130
	AT 235228	E	20030415	AT 1995-908414	19941130
	US 5571497	A	19961105	US 1995-468056	19950606
	CN 1180310	A	19980429	CN 1996-193069	19960327
	CN 1102045	B	20030226		

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US 5935553	A	19990810	US 1996-758179	19961125
US 6743779	B1	20040601	US 1997-841169	19970429
US 5985246	A	19991116	US 1997-888426	19970708
AU 9856271	A1	19980507	AU 1998-56271	19980224
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HK 1013625	A1	20000420	HK 1998-114978	19981223
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GR 3036877	T3	20020131	GR 2001-401740	20011011
PRAI US 1989-455707	B2	19891222		
US 1990-569828	A2	19900820		
US 1991-716899	B2	19910618		
US 1991-717084	A2	19910618		
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US 1993-76250	A2	19930611		
US 1993-159674	B2	19931130		
US 1993-159687	A2	19931130		
US 1993-160232	A2	19931130		
US 1994-307305	A2	19940916		
WO 1990-US7500	W	19901219		
US 1991-716793	A	19910618		
US 1991-750877	A3	19910826		
US 1992-818069	A3	19920108		
WO 1992-US2615	A	19920331		
US 1992-967974	A3	19921027		
US 1993-17683	A3	19930212		
US 1993-18112	B3	19930217		
US 1993-85608	A3	19930630		
US 1993-88268	A3	19930707		
US 1993-163039	A3	19931206		
US 1994-212553	B2	19940311		
AU 1994-70416	A3	19940519		
US 1994-346426	A	19941129		
AU 1995-21850	A3	19941130		
WO 1994-US13817	W	19941130		
US 1995-395683	A3	19950228		
US 1995-468056	A3	19950606		
US 1995-471250	A3	19950606		
US 1996-640554	B2	19960501		
US 1996-665719	A3	19960618		
US 1997-785661	B2	19970117		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5733572	ICM	A61K009-127
	NCL	424450000
US 5733572	ECLA	A61K007/00M; A61K007/00M4D; A61K007/00M4; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/0U; A61K047/48W8D; A61K047/48W6D; A61K049/00B12K12; A61K049/00E12P; A61K049/00E12B
US 5469854	ECLA	A61K009/127; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/48H; A61K049/00E12B; A61K049/00E12P
US 5580575	ECLA	A61K007/00M; A61K007/00M4D; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/4W6D; A61K047/48W8D; A61K049/18K12; A61K049/22P4; A61K049/22P16
US 5348016	ECLA	A61K007/00M; A61K007/00M4D; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/4W6D; A61K047/48W8D; A61K049/18K12; A61K049/22P4; A61K049/22P16
US 5542935	ECLA	A61K007/00M; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/48W6D; A61K047/48W8D; A61K049/00B12K12; A61K049/00E12B; A61K049/00E12P; A61K007/00M4D; A61K009/127; A61K009/127P
US 5585112	ECLA	A61K007/00M; A61K007/00M4D; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/4W8D; A61K047/48W6D; A61K049/18K12; A61K049/22P4; A61K049/22P16
US 5769080	ECLA	A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/48W8D; A61K047/48W6D; A61K009/00B12K12; A61K049/00E12P; A61K049/00E12B
WO 9428874	ECLA	A61K009/127; A61K041/00M; A61K041/00U; A61K047/48W6D; A61K047/48W8D; A61K049/18K12; A61K049/22P4; A61K009/127P; A61K009/127P2

US 5773024      ECLA      A61K007/00M; A61K007/00M4D; A61K007/00M4; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/0U; A61K047/48W8D; A61K047/48W6D; A61K049/18K12; A61K049/22P4; A61K049/22P16; G01R033/28A

WO 9515118      ECLA      A61K007/00M4; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/48W6D; A61K; A61K049/00B12K12; A61K049/00E12B; A61K049/00E12P

US 5571497      ECLA      A61K007/00M; A61K007/00M4D; A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/48W8D; A61K049/22P4; A61K049/22P16

US 5935553      ECLA      A61K009/127; A61K009/127P; A61K009/127P2; A61K041/00M; A61K041/00U; A61K047/48W8D; A61K047/48W6D; A61K009/00B12K12; A61K049/00E12P; A61K049/00E12B

US 6743779      ECLA      A61K009/127; A61K009/127B2; A61K041/00M; A61K048/00; C12N015/87; C12N015/88

US 5985246      ECLA      A61K009/127; A61K009/127P; A61K041/00M; A61K041/00U; A61K047/48W8D; A61K049/00E12B; A61K049/00E12P

AB      Gas and gaseous precursor filled microspheres, and foams provide novel topical and s.c. delivery vehicles for various active ingredients, including drugs and cosmetics. Gas and gaseous precursor filled microcapsules were prepared from dipalmitoylphosphatidylcholine.

ST      microcapsule gas filled; topical microcapsule gas filled; subcutaneous microcapsule gas filled

IT      Carbohydrates, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (acidic; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT      Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (alkylbenzyldimethyl, chlorides; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT      Peptides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antisense; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT      Diglycerides  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (digalactosyl; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT      Alditols  
Sterols  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (esters; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT      Hydrocarbons, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (fluoro; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT      Acacia  
Alcohols, biological studies  
Alkanes, biological studies  
Allergy inhibitors  
Amines, biological studies  
Anthocyanins  
Anti-inflammatory agents  
Antibacterial agents  
Antibiotics  
Anticoagulants  
Antioxidants  
Antisense oligonucleotides  
Antiviral agents  
Bentonite, biological studies  
Buffers  
Canola oil  
Carbohydrates, biological studies  
Cardiovascular agents  
Chelating agents  
Collagens, biological studies  
Coloring materials  
Corn oil  
Cosmetics  
DNA  
Diuretics  
Dystrophin  
Elastins  
Enkephalins

Enzymes, biological studies  
 Essential oils  
 Esters, biological studies  
 Fatty acids, biological studies  
 Fluoropolymers, biological studies  
 Foaming agents  
 Fungicides  
 Gases  
 Gene, animal  
 Glycolipids  
 Glycols, biological studies  
 Growth factors, animal  
 Hormones, animal, biological studies  
 Immunosuppressants  
 Lipids, biological studies  
 Micelles  
 Olive oil  
 Peanut oil  
 Peptides, biological studies  
 Perfluorocarbons  
 Petrolatum  
 Phosphatidic acids  
 Phosphatidylcholines, biological studies  
 Phosphatidylethanolamines, biological studies  
 Phosphatidylglycerols  
 Phosphatidylinositols  
 Phosphatidylserines  
 Phospholipids, biological studies  
 Polyamides, biological studies  
 Polyesters, biological studies  
 Polyolefins  
 Polyoxyalkylenes, biological studies  
 Polysaccharides, biological studies  
 Polyurethanes, biological studies  
 Preservatives  
 Protozoacides  
 Quaternary ammonium compounds, biological studies  
 Radionuclides, biological studies  
 Safflower oil  
 Sphingolipids  
 Sulfatides  
 Sulfoxides  
 Terpenes, biological studies  
 Tocopherols  
 Tuberculostatics  
 Vitamins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (gas and gaseous precursor filled microspheres as topical and s.c.  
     delivery vehicles)

IT Interleukin 2  
 Interleukin 4  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (genes, DNA encoding; gas and gaseous precursor filled microspheres as  
     topical and s.c. delivery vehicles)

IT Anesthetics  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (local; gas and gaseous precursor filled microspheres as topical and  
     s.c. delivery vehicles)

IT Drug delivery systems  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (microcapsules; gas and gaseous precursor filled microspheres as  
     topical and s.c. delivery vehicles)

IT Encapsulation  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (microencapsulation; gas and gaseous precursor filled microspheres as  
     topical and s.c. delivery vehicles)

IT Antibodies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (monoclonal; gas and gaseous precursor filled microspheres as topical  
     and s.c. delivery vehicles)

IT Drug delivery systems  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (ointments; gas and gaseous precursor filled microspheres as topical  
     and s.c. delivery vehicles)

IT Uronic acids  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyuronic acids; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT Carbohydrates, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sugar esters; gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT 50-02-2, Dexamethasone 50-03-3, Hydrocortisone acetate 50-04-4, Cortisone acetate 50-23-7, Hydrocortisone 50-24-8 50-33-9, Phenylbutazone, biological studies 50-56-6, Oxytocin, biological studies 50-70-4, Sorbitol, biological studies 50-78-2, Aspirin 50-81-7, Ascorbic acid, biological studies 51-05-8, Procaine hydrochloride 51-34-3, Scopolamine 52-21-1 52-67-5, Penicillamine 53-03-2, Prednisone 53-36-1, Methylprednisolone acetate 53-86-1, Indomethacin 54-05-7, Chloroquine 54-11-5, Nicotine 54-85-3, Isoniazid 56-75-7, Chloramphenicol 56-81-5, 1,2,3-Propanetriol, biological studies 57-09-0, Cetyltrimethylammonium bromide 57-11-4, Octadecanoic acid, biological studies 57-13-6, Urea, biological studies 57-15-8, Chlorobutanol 57-55-6, 1,2-Propanediol, biological studies 57-88-5, Cholesterol, biological studies 58-08-2, Caffeine, biological studies 59-02-9, alpha.-Tocopherol 60-00-4, Edta, biological studies 60-54-8, Tetracycline 61-32-5, Methicillin 61-33-6, Penicillin g, biological studies 61-68-7, Mefenamic acid 64-17-5, Ethanol, biological studies 65-49-6, p-Aminosalicylic acid 65-85-0, Benzoic acid, biological studies 66-79-5, Oxacillin 67-43-6, DTPA 67-56-1, Methanol, biological studies 67-68-5, Dmso, biological studies 67-78-7, Triamcinolone diacetate 68-19-9D, Cyanocobalamin, derivs. 68-41-7, Cycloserine 69-53-4, Ampicillin 69-72-7, Salicylic acid, biological studies 73-78-9, Lidocaine hydrochloride 74-88-4, Iodomethane, biological studies 74-98-6, Propane, biological studies 75-00-3, Chloroethane 75-10-5, Difluoromethane 75-18-3, Methyl sulfide 75-19-4, Cyclopropane 75-28-5, Isobutane 75-29-6, 2-Chloropropane 75-31-0, 2-Aminopropane, biological studies 75-34-3, 1,1-Dichloroethane 75-43-4, Dichlorofluoromethane 75-45-6, Chlorodifluoromethane 75-46-7, Trifluoromethane 75-56-9, biological studies 75-61-6, Dibromodifluoromethane 75-63-8, Bromotrifluoromethane 75-69-4, Trichlorodifluoromethane 75-71-8, Dichlorodifluoromethane 75-72-9, Chlorotrifluoromethane 75-73-0, Tetrafluoromethane 76-13-1, 1,1,2-Trichloro-1,2,2-trifluoroethane 76-15-3, 1-Chloro-1,1,2,2,2-pentafluoroethane 76-16-4, Hexafluoroethane 76-19-7, Perfluoropropane 76-25-5, Triamcinolone acetonide 77-92-9, Citric acid, biological studies 78-78-4, 2-Methylbutane 78-79-5, biological studies 78-80-8 79-81-2, Retinol palmitate 80-08-0 83-43-2, Methylprednisolone 87-08-1, Penicillin v 87-73-0, Saccharic acid 93-60-7, Methyl nicotinate 94-14-4, Isobutyl p-aminobenzoate 94-26-8, Butylparaben 95-80-7, 2,4-Diaminotoluene 96-40-2, 3-Chlorocyclopentene 96-49-1, 1,3-Dioxolan-2-one 98-96-4, Pyrazinamide 99-76-3, Methylparaben 100-51-6, Benzyl alcohol, biological studies 102-71-6, biological studies 103-41-3, Benzyl cinnamate 106-98-9, 1-Butene, biological studies 106-99-0, 1,3-Butadiene, biological studies 107-00-6, 1-Butyne 107-01-7, 2-Butene 107-25-5, Methyl vinyl ether 107-41-5, Hexylene glycol 108-95-2, Phenol, biological studies 109-66-0, n-Pentane, biological studies 109-67-1, 1-Pentene 109-92-2, Ethyl vinyl ether 109-93-3 110-27-0, Isopropyl myristate 110-44-1, Sorbic acid 111-02-4, Squalene 111-42-2, biological studies 112-30-1, 1-Decanol 112-53-8, 1-Dodecanol 112-72-1, Myristyl alcohol 112-80-1, 9-Octadecenoic acid (Z)-, biological studies 112-92-5, n-Octadecyl alcohol 114-07-8, Erythromycin 115-10-6, Methyl ether 115-25-3, Octafluorocyclobutane 118-42-3, Hydroxychloroquine 118-58-1, Benzyl salicylate 121-54-0, Benzethonium chloride 122-18-9, Benzylidimethyl hexadecylammonium chloride 122-57-6, 4-Phenyl-3-butene-2-one 123-03-5 124-03-8, Cetyltrimethylammonium bromide 124-38-9, Carbon dioxide, biological studies 124-40-3, Dimethylamine, biological studies 124-94-7, Triamcinolone 125-02-0, Prednisolone sodium phosphate 125-04-2, Hydrocortisone sodium succinate 126-07-8, Griseofulvin 126-18-1, Smilagenin 126-19-2, Sarsasapogenin 129-20-4, Oxyphenbutazone 130-95-0, Quinine 133-51-7, Meglumine antimonate 136-47-0, Tetracaine hydrochloride 137-66-6, Ascorbyl palmitate 139-07-1, Benzylidimethylhexadecylammonium chloride 139-08-2, Benzylidimethyl tetradecylammonium chloride 140-72-7, Cetylpyridinium bromide 141-43-5, biological studies 143-28-2, Oleyl alcohol 143-62-4, Digitoxigenin 147-52-4, Nafcillin 151-21-3, Sodium lauryl sulfate, biological studies 151-73-5, Betamethasone sodium phosphate 154-21-2, Lincomycin 287-23-0, Cyclobutane 302-79-4, Retinoic acid 334-99-6, Nitrosotrifluoromethane 335-02-4, Nitrotrifluoromethane 335-05-7, Trifluoromethanesulfonyl fluoride 335-57-9, Perfluoroheptane 338-65-8, 2-Chloro-1,1-difluoroethane 350-51-6, 3-Fluorostyrene

353-36-6, Fluoroethane 353-85-5, Trifluoroacetonitrile 353-87-7, Bromodifluoromethane 354-25-6, 1-Chloro-1,1,2,2-tetrafluoroethane 354-72-3, Nitrosopentafluoroethane 354-80-3, Perfluoroethylamine 354-81-4, Nitropentafluoroethane 355-25-9, Decafluorobutane 355-42-0, Perfluorohexane 357-26-6, Perfluoro-1-butene 359-35-3, 1,1,2,2-Tetrafluoroethane 360-89-4, Perfluoro-2-butene 371-67-5, 1,1,1-Trifluorodiazooethane 371-77-7 371-78-8, Trifluoromethyl sulfide 373-52-4, Bromofluoromethane 374-07-2, 1,1-Dichloro-1,2,2,2-tetrafluoroethane 376-87-4, Perfluoropent-1-ene 378-44-9, Betamethasone 420-45-1, 2,2-Difluoropropane 420-46-2, 1,1,1-Trifluoroethane 421-56-7, Chlorodifluoromethane 421-83-0, Trifluoromethanesulfonyl chloride 423-26-7, Heptafluoro-1-nitrosopropane 423-33-6, Propane, 1,1,1,2,2,3,3-heptafluoro-3-nitro- 430-53-5, 1,1-Dichloro-2-fluoroethane 435-97-2, Phenprocoumon 443-48-1, Metronidazole 460-12-8, Butadiyne 460-13-9, 1-Fluoropropane 461-68-7, Tetrafluoroallene 463-49-0, Allene 463-58-1, Carbonyl sulfide 463-82-1, Neopentane 465-65-6, Naloxone 465-99-6, Hederagenin 482-54-2, Cyclohexanediaminetetraacetic acid 503-17-3, 2-Butyne 508-02-1, Oleanolic acid 508-99-6, Hydrocortisone cypionate 514-36-3, Fludrocortisone acetate 521-13-1, Cholesterol butyrate 526-95-4, Gluconic acid 532-32-1, Sodium benzoate 536-33-4, Ethionamide 540-54-5, 1-Chloropropane 547-64-8, Methyl lactate 555-43-1, Glycerol tristearate 555-44-2, Glycerol tripalmitate 555-45-3, Glycerol trimyristate 559-40-0, Octafluorocyclopentene 563-45-1, 3-Methyl-1-butene 563-46-2, 2-Methyl-1-butene 582-25-2, Potassium benzoate 590-19-2, 1,2-Butadiene 591-93-5, 1,4-Pentadiene 593-53-3, Fluoromethane 593-70-4, Chlorofluoromethane 593-98-6, Bromochlorofluoromethane 594-11-6, Methylcyclopropane 598-23-2, 3-Methyl-1-butyne 598-53-8, Methyl iso-propyl ether 598-56-1 598-61-8, Methylcyclobutane 601-34-3, Cholesterol palmitate 623-84-7, Propylene glycol diacetate 624-72-6, 1,2-Difluoroethane 624-91-9, Methyl nitrite 625-04-7, 4-Amino-4-methylpentan-2-one 632-58-6, Tetrachlorophthalic acid 644-62-2 661-54-1, 3,3,3-Trifluoropropyne 661-97-2, 1,1,1,2,3,3-Hexafluoro-2,3 dichloropropane 677-56-5, 1,1,1,2,2,3-Hexafluoropropane 678-26-2, Perfluoropentane 684-16-2, Hexafluoro acetone 685-63-2, Hexafluoro-1,3-butadiene 689-97-4, Vinyl acetylene 692-50-2, Perfluoro-2-butyne 697-11-0, Perfluorocyclobutene 767-00-0, 4-Cyanophenol 768-94-5, Amantadine 822-16-2, Sodium stearate 921-13-1, Chlorodinitromethane

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles)

IT 927-84-4, Trifluoromethyl peroxide 928-45-0, Butyl nitrate 929-59-9 931-91-9, Hexafluorocyclopropane 987-24-6, Betamethasone acetate 1070-11-7, Ethambutol hydrochloride 1119-94-4, Lauryltrimethylammonium bromide 1119-97-7, Myristyltrimethylammonium bromide 1177-87-3, Dexamethasone acetate 1180-43-4, Cholesterol isobutyrate 1191-96-4, Ethylcyclopropane 1256-86-6, Cholesterol sulfate 1314-13-2, Zinc oxide, biological studies 1321-10-4, Chlorocresol 1323-39-3, Propylene glycol monostearate 1323-83-7, Glycerol distearate 1327-43-1, Magnesium aluminum silicate 1338-39-2, Sorbitan monolaurate 1338-41-6, Sorbitan monostearate 1338-43-8, Sorbitan monooleate 1344-95-2, Calcium silicate 1397-89-3, Amphotericin b 1398-61-4, Chitin 1400-61-9, Nystatin 1404-04-2, Neomycin 1405-37-4, Capreomycin sulfate 1406-16-2, Vitamin d 1406-18-4, Vitamin e 1493-03-4, Difluoriodomethane 1597-82-6, Paramethasone acetate 1630-94-0, 1,1-Dimethylcyclopropane 1722-62-9, Mepivacaine hydrochloride 1759-88-2 1842-05-3, 1,1-Dichloro-1,2-difluoroethane 2022-85-7, Flucytosine 2314-97-8, Iodotrifluoromethane 2366-52-1, 1-Fluorobutane 2375-03-3, Methylprednisolone sodium succinate 2392-39-4, Dexamethasone sodium phosphate 2462-63-7, Dioleoylphosphatidylethanolamine 2511-95-7, 1,2-Dimethyl-cyclopropane 2551-62-4, Sulfur hexafluoride 2644-64-6, Dipalmitoylphosphatidylcholine 2671-68-3, Lanosterol acetate 2809-21-4, Etidronic acid 3116-76-5, Dicloxacillin 3385-03-3, Flunisolide 3485-14-1, Cyclacillin 3511-16-8, Hetacillin 3529-04-2, Benzylidimethyl hexadecylammonium bromide 3810-74-0, Streptomycin sulfate 3858-89-7, Chloroprocaine hydrochloride 3992-98-1, Ergosterol palmitate 4539-70-2, Distearoylphosphatidylcholine 4697-36-3, Carbenicillin 4786-20-3, Crotononitrile 4901-75-1, 3-Ethyl-3-methylidiaziridine 5534-09-8, Beclomethasone dipropionate 5536-17-4, Vidarabine 5611-51-8, Triamcinolone hexacetonide 5714-22-7, Sulfur fluoride (S2F10) 6000-74-4, Hydrocortisone sodium phosphate 6556-12-3, Glucuronic acid 7047-84-9, Aluminum monostearate 7235-40-7, Beta carotene 7281-04-1, Benzylidimethyldecylammonium bromide 7440-01-9, Neon, biological studies 7440-15-5, Rhenium, biological studies 7440-24-6, Strontium, biological studies 7440-37-1, Argon, biological studies

7440-59-7, Helium, biological studies 7440-63-3, Xenon, biological studies 7440-65-5, Yttrium, biological studies 7553-56-2, Iodine, biological studies 7631-86-9, Silicon dioxide, biological studies 7637-07-2, Boron trifluoride, biological studies 7681-14-3, Prednisolone tebutate 7727-37-9, Nitrogen, biological studies 7732-18-5, Water, biological studies 7782-41-4, Fluorine, biological studies 7782-44-7, Oxygen, biological studies 7783-82-6, Tungsten hexafluoride 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-65-1, Tragacanth 9000-69-5, Pectin 9001-78-9, Alkaline phosphatase 9002-06-6, Thymidine kinase 9002-18-0, Agar 9002-60-2, Corticotropin, biological studies 9002-61-3, Human chorionic gonadotropin 9002-62-4, Prolactin, biological studies 9002-68-0, FSH 9002-71-5, Thyrotropin 9002-76-0, Gastrin 9002-84-0, Polytetrafluoroethylene 9002-86-2, Polyvinylchloride 9002-88-4, Polyethylene 9002-89-5, Polyvinyl alcohol 9003-07-0, Polypropylene 9003-39-8, Povidone 9003-53-6, Polystyrene 9004-10-8, Insulin, biological studies 9004-34-6, Cellulose, biological studies 9004-53-9, Dextrin 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methylcellulose 9004-67-5, Methylcellulose 9004-98-2, Polyoxethylene oleyl ether 9004-99-3, Polyoxethylene stearate 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-37-2, Propylene glycol alginate 9005-38-3, Sodium alginate 9005-49-6, Heparin, biological studies 9005-64-5, Polysorbate 20 9005-65-6, Polysorbate 80 9005-66-7, Polysorbate 40 9005-67-8, Polysorbate 60 9005-79-2, Glycogen, biological studies 9005-82-7, Amylose 9007-12-9, Calcitonin 9007-27-6, Chondroitin 9007-92-5, Glucagon, biological studies 9011-14-7, Polymethylmethacrylate 9011-97-6, Cholecystokinin 9012-36-6, Agarose 9012-72-0, Glucan 9013-95-0, Levan 9014-63-5, Xylan 9026-93-1, Adenosine deaminase 9034-40-6, Luteinizing hormone releasing hormone 9035-81-8, Trypsin inhibitor 9036-88-8, Mannan 9037-22-3, Amylopectin 9037-55-2, Galactan 9037-90-5, Fructan 9046-38-2, Galacturonan 9046-40-6, Pectic acid 9050-04-8 9057-02-7, Pullulan 9060-75-7, L-Arabinan 9072-19-9, Fucoidan 10024-97-2, Nitrous oxide, biological studies 10549-91-4 11103-57-4, Vitamin a 11138-66-2, Xanthan gum 12001-79-5, Vitamin k 13264-41-0, Cetyltrimethylammonium chloride 13292-46-1, Rifampin 15686-71-2, Cephalexin 15687-27-1, Ibuprofen 17435-78-8, Cholesterol glucuronide 18010-40-7, Bupivacaine hydrochloride 18323-44-9, Clindamycin 18656-38-7, Dimyristoylphosphatidylcholine 18656-40-1, Dilauroylphosphatidylcholine 18773-88-1, Benzylidimethyl tetradecylammonium bromide 19247-09-7 19600-01-2, Ganglioside gm 2 20947-95-9 22204-53-1, Naproxen 22494-42-4, Diflunisal 22916-47-8, Miconazole 24521-77-5 24634-61-5, Potassium sorbate 24764-97-4, 2-Bromobutyraldehyde 24937-47-1, Polyarginine 25038-59-9, Pet, biological studies 25104-18-1, Polylysine 25212-18-4, Polyarginine 25322-68-3 25322-69-4, Polypropylene glycol 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Polylactic acid 26171-23-3, Tolmetin 26266-57-9, Sorbitan monopalmitate 26787-78-0, Amoxicillin 27070-61-7, Hexafluoropropane 29593-08-6 30516-87-1, Azidothymidine 31362-50-2, Bombesin 31566-31-1, Glyceryl monostearate 33735-55-6 34077-87-7, Dichloror trifluoroethane 34787-01-4, Ticarcillin 35602-69-8, Cholesterol stearate 36322-90-4, Piroxicam 36637-19-1, Etidocaine hydrochloride 36653-82-4, Cetyl alcohol 36791-04-5, Ribavirin 37266-93-6, Sucrose laurate 37318-31-3, Sucrose stearate 37330-34-0 37331-28-5, Pustulan 37377-93-8, .beta.-Lipotropin 37758-47-7, Ganglioside gm1 38000-06-5, Polylysine 38194-50-2, Sulindac 38821-53-3, Cephadrine 39300-95-3, Sucrose palmitate 39422-22-5, .gamma.-Lipotropin 50370-12-2, Cefadroxil 50402-72-7, 2,3,6-Trimethylpiperidine 50972-17-3, Bacampicillin 53563-63-6, Glycerol dimyristate 53994-73-3, Cefaclor 57223-18-4, 1-Nonen-3-yne 57916-92-4, Carbomer 934p 59227-89-3, Azone 59277-89-3, Acyclovir 60095-23-0 60495-58-1, Galactocarolose 64612-25-5, Fucan 65277-42-1, Ketoconazole 67382-96-1, Melanin concentrating hormone 67896-63-3, Dipentadecanoylphosphatidylcholine 68302-57-8, Amlexanox 68354-92-7 68354-99-4 68737-67-7, Dioleoylphosphatidylcholine 69992-87-6, Keratan 73294-85-6 75634-40-1, Dermatan 76822-97-4 79217-60-0, Cyclosporin 98023-09-7 106392-12-5, Poloxamer 108173-78-0 109144-61-8 113669-21-9 116632-15-6, 1,2,3-Nonadecane-tricarboxylic acid-2-hydroxytrimethyleneester 117076-33-2 118248-91-2 127512-30-5, Cholesteryl(4'-trimethylammonio)butanoate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (gas and gaseous precursor filled microspheres as topical and s.c. delivery vehicles);

IT 132172-61-3 161293-59-0 161441-83-4 172261-50-6 172261-51-7  
172261-52-8 172261-53-9 172261-54-0 172261-55-1 172261-56-2

172261-57-3 172261-58-4 173855-10-2 186198-32-3 205645-72-3  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (gas and gaseous precursor filled microspheres as topical and s.c.  
 delivery vehicles)

IT 9002-79-3, Melanocyte stimulating hormone  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (genes, DNA encoding; gas and gaseous precursor filled microspheres as  
 topical and s.c. delivery vehicles)

IT 9054-89-1  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (manganese-dependent; gas and gaseous precursor filled microspheres as  
 topical and s.c. delivery vehicles)

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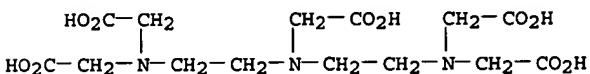
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IT 67-43-6, DTPA 2809-21-4, Etidronic acid

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gas and gaseous precursor filled microspheres as topical and s.c.  
delivery vehicles)

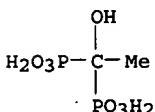
RN 67-43-6 HCPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
INDEX NAME)



RN 2809-21-4 HCPLUS

CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L74 ANSWER 21 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN

AN 1998:71105 HCPLUS

DN 128:145166

ED Entered STN: 06 Feb 1998

TI Desiccant emulsion comprising kaolin and titanium dioxide for the skin

IN Chitarra Souza, Simoni; Martins Matheus, Luiz Gustavo

PA Industria E Comercio De Cosmeticos Natura Ltda., Brazil

SO PCT Int. Appl., 11 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9802138	A1	19980122	WO 1997-BR27	19970710
	W: CA, MX, US			RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE	
	BR 9603084	A	19980505	BR 1996-3084	19960712
PRAI	BR 1996-3084	A	19960712		

## CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 9802138 ICM A61K007-48

WO 9802138 ECLA A61K007/48A

AB Desiccant composition, in emulsion form, for the skin, which comprises a new set of active agents with proven effectiveness to collaborate in the reconstitution of the skin affected by excessive skin secretions, turning it drier until it acquires the characteristics of normal skin, associated to the reduction of local irritations and inflammations incidence, observed mainly in cases of acne. The referred active agents set is constituted by the association of two inorg. desiccant agents, kaolin and titanium dioxide, with several organic components, namely: a skin renovating agent, allantoin; a moisturizing agent, panthenol; a cicatrizant agent, calendula extract; an antiseptic agent, benzalkonium chloride; an anti-inflammatory agent, bisabolol and, as capillary permeability regulation agent, rutin. These active components are emulsified, resp. dispersed, in an aqueous vehicle, with the help of specific agents, as usual emulgators and humectants, and can also contain other cooperative components, as preservatives, emollients, thickeners, pigments and, eventually, sequestering agents, forming the final emulsion exhibiting the desired characteristics relating to physicochem. stability, consistency, endurance of its specific actuation, color and pleasant skin sensorial. Formulation of emulsion containing above compnns. are disclosed.

ST desiccant emulsion kaolin titanium dioxide skin

IT Quaternary ammonium compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(alkyl; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Quaternary ammonium compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(alkylbenzyldimethyl, chlorides; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Wound healing promoters

(cicatrizants; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Polyoxyalkylenes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(derivs.; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Anti-inflammatory agents

Antibacterial agents

Drying agents

Dyes

Emulsifying agents

Humectants

Pigments, nonbiological

Preservatives

Sequestering agents

Thickening agents

(desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Acrylic polymers, biological studies

Fatty acids, biological studies

Glycols, biological studies

Kaolin, biological studies

Lactoferrins

Lanolin

Paraffin oils

Polyoxyalkylenes, biological studies

Polysiloxanes, biological studies

Waxes

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Cosmetics

(emollients; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Cosmetics

(emulsions; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Fatty acids, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (ethoxylated; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Calendula  
 (extract; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Alcohols, biological studies  
 Alcohols, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (fatty, ethoxylated; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Amines, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (fatty, phosphated; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Alcohols, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (fatty; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Cosmetics  
 (moisturizers; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (vegetable; desiccant emulsion comprising kaolin and titanium dioxide for skin)

IT 50-00-0, Formaldehyde, biological studies 50-70-4, Sorbitol, biological studies 52-51-7, 2-Bromo-2-nitropropane 1,3 diol 56-81-5, Glycerol, biological studies 56-81-5D, Glycerol, derivs. 57-10-3, Palmitic acid, biological studies 60-00-4D, Edta, salts 65-85-0D, Benzoic acid, alkyl derivs., biological studies 70-51-9, Deferrroxamine 81-13-0, Panthenol; 97-59-6, Allantoin 99-96-7D, Paraben, derivs. 110-34-9, Isobutyl palmitate 111-60-4, Ethylene glycol stearate 112-10-7, Isopropyl stearate 112-80-1, Oleic acid, biological studies 112-92-5, 1-Octadecanol 122-99-6, Phenoxyethanol 153-18-4, Rutin. 504-78-9D, Thiazolidine, derivs. 515-69-5, Bisabolol 540-10-3, Cetyl palmitate 661-19-8, Behenyl alcohol 1332-37-2, Iron oxide, biological studies 1335-30-4, Aluminum silicate 1343-88-0, Magnesium silicate 2809-21-4, Etidronic acid 4080-31-3, Quaternium 15 9002-89-5 9003-20-7, Polyvinyl acetate 9004-34-6D, Cellulose, derivs., biological studies 9005-25-8, Starch, biological studies 10233-13-3, Isopropyl laurate 11099-07-3, Glyceryl stearate 12441-09-7, Sorbitan 13463-67-7, Titanium dioxide, biological studies 16958-85-3, Octyl palmitate 22882-95-7, Isopropyl linoleate 25322-68-3 25322-68-3D, Polyethylene glycol, derivs. 25339-09-7, Isocetyl stearate 29656-58-4D, Hydroxybenzoic acid, alkyl derivs. 35274-05-6, Cetyl lactate 39236-46-9, Imidazolidinyl urea 67167-59-3, Polyethylene glycol stearate 68171-33-5, Isopropyl isostearate 78491-02-8, Diazolidinyl urea 93803-86-2, Octyl isostearate  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (desiccant emulsion comprising kaolin and titanium dioxide for skin)

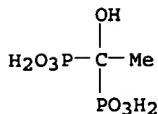
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (2) Lancaster Group; WO 9617588 A 1996 HCPLUS
- (3) Schulke & Mayr; DE 3330628 A 1985 HCPLUS
- (4) The Boots Company; WO 9308793 A 1993 HCPLUS

IT 2809-21-4, Etidronic acid  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (desiccant emulsion comprising kaolin and titanium dioxide for skin)

RN 2809-21-4 HCPLUS  
 CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L74 ANSWER 22 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:756975 HCPLUS  
 DN 128:16284  
 ED Entered STN: 04 Dec 1997  
 TI Agent and process for dyeing and tinting keratinous fibers  
 IN Hurschmann, Brigitte; Hollenberg, Detlef  
 PA Henkel Kommanditgesellschaft Auf Aktien, Germany; Hurschmann, Brigitte;  
 Hollenberg, Detlef  
 SO PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9742932	A1	19971120	WO 1997-EP2280	19970505
	W: AU, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19619071	A1	19971120	DE 1996-19619071	19960513
	AU 9728911	A1	19971205	AU 1997-28911	19970505
	AU 709167	B2	19990826		
	EP 914080	A1	19990512	EP 1997-922961	19970505
	EP 914080	B1	20010829		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, FI				
	JP 2000510131	T2	20000808	JP 1997-540457	19970505
	AT 204739	E	20010915	AT 1997-922961	19970505
	ES 2163767	T3	20020201	ES 1997-922961	19970505
PRAI	DE 1996-19619071	A	19960513		
	WO 1997-EP2280	W	19970505		

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 9742932	ICM	A61K007-13
	DE 19619071	ECLA	A61K007/13

AB The affinity of direct dyes to keratinous fibers, especially human hair, is markedly improved by adding a combination of (1) an amino polycarboxylic acid (e.g. EDTA) or salt thereof and (2) isoascorbic acid or a salt thereof. In addition, the gloss of the dyed hair is visibly improved. Thus, a tinting lotion contained C12-18 fatty alcs. 3.00, Emulgade 1000 NI 2.00, lauric acid 3.00, Texapon N70 3.00, Dehyton K 3.00, methylparaben 0.20, propylparaben 0.20, isoascorbic acid 0.10, Trilon B (tetrasodium EDTA) 0.25, 2-amino-2-methylpropanol 0.70, HC Blue 2 0.70, Violet 1,4-D 0.30, HC Yellow 2 0.40, fragrance 0.30, and distilled water to 100 weight parts (pH 7).

ST hair dye amino polycarboxylate isoascorbate; EDTA isoascorbate hair dye

IT Adsorption  
 (agent and process for dyeing and tinting keratinous fibers)

IT Alcohols, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

(amino, salts, with amino polycarboxylic acids; agent and process for dyeing and tinting keratinous fibers)

IT Hair preparations  
 (dyes, direct; agent and process for dyeing and tinting keratinous fibers)

IT Amino acids, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

(polycarboxylic; agent and process for dyeing and tinting keratinous fibers)

IT 60-00-4, EDTA, biological studies 64-02-8, Tetrasodium ethylenediaminetetraacetate 67-43-6 89-65-6, Isoascorbic acid 139-13-9, Nitrilotriacetic acid 139-33-3, Disodium ethylenediaminetetraacetate 150-39-0, N-(Hydroxyethyl)ethylenediaminetriacetic acid 7379-26-2, Ammonium ethylenediaminetetraacetate

17100-11-7, Aluminum ethylenediaminetetraacetate 19010-73-2,  
 Aluminum nitrilotriacetate 20148-50-9 32685-17-9, Ammonium  
 nitrilotriacetate 52168-28-2, Ammonium diethylenetriaminepentaacetate  
 199118-17-7 199118-19-9  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

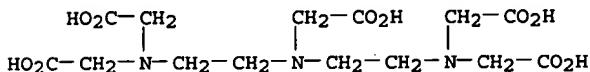
(agent and process for dyeing and tinting keratinous fibers)

IT 67-43-6  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)

(agent and process for dyeing and tinting keratinous fibers)

RN 67-43-6 HCAPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)



L74 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:375233 HCAPLUS

DN 127:70599

ED Entered STN: 16 Jun 1997

TI Removal of minerals from human hair and animal keratin fibers by chelating  
 agents

IN Said, Hayel; Said, Hian

PA L'Avante Garde, Inc., USA

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-06

NCL 424701000

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 5635167	A	19970603	US 1994-365594	19941228
PRAI US 1994-365594				

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 5635167 ICM A61K007-06

NCL 424701000

US 5635167 ECLA A61K008/44; A61K008/55; A61Q005/02

OS MARPAT 127:70599

AB A process for the removal of exogenous minerals which have become attached to human hair or keratin fiber includes the steps of contacting at least one chelating agent to the human hair or keratin fiber, the chelating agent selected from the group consisting of amino acid-type, polyphosphate-type and phosphonate-type agents, maintaining contact with the chelating agent and the human hair or keratin fiber for a period of time sufficient to permit the chelating agent to complex with the exogenous minerals, thereby removing at least a portion of the attached minerals, and rinsing the chelating agent. The process is enhanced with the pH is adjusted to a range of between 4 to 9, preferably 5 to 8. The chelating agent is added at a concentration of 4% by weight to 25% by weight, preferably 5 to 20% by weight. In a preferred case, the chelating agent is selected from the group consisting of a salt of EDTA, a salt of hydroxyethylenediaminetetraacetic acid, a salt of diethylenetriaminepentaacetic acid, a salt of nitrilotriacetic acid and a salt of tripolyphosphate, preferably the sodium salt. The chelating agents used are preferably blends of chelating agents thereby achieve a synergistic effect. Copper-contaminated hair containing 5260 ppm Cu was treated with a solution containing Na4EDTA 2, Na3 hydroxyethylenediaminetetraacetic acid 2, disodium ethanoldiglycine 1% to reduce Cu to 500 ppm. Formulations of various hair preps. for removal of minerals from hair are disclosed.

ST hair mineral removal chelating agent

IT Hair preparations

(for removal of minerals; removal of minerals from human hair and  
 animal keratin fibers by chelating agents)

IT Chelating agents

(removal of minerals from human hair and animal keratin fibers by chelating agents)

IT Minerals, biological studies  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(removal of minerals from human hair and animal keratin fibers by chelating agents)

IT Amino acids, biological studies  
Polyporphates  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(removal of minerals from human hair and animal keratin fibers by chelating agents)

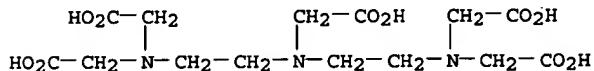
IT 14127-61-8, Calcium ion, biological studies 14280-50-3, Lead 2+, biological studies 15158-11-9, biological studies 15438-31-0, Ferrous ion, biological studies 20074-52-6, Ferric ion, biological studies 22537-22-0, Magnesium ion, biological studies 22537-23-1, Aluminum ion, biological studies 22537-48-0, Cadmium ion, biological studies 23713-49-7, Zinc ion, biological studies RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(removal of minerals from human hair and animal keratin fibers by chelating agents)

IT 64-02-8, Tetrasodium EDTA 135-37-5 139-89-9 140-01-2, Pentasodium diethylenetriaminepentaacetate 5064-31-3 7758-29-4, Sodium tripolyphosphate 15477-76-6, Phosphonate  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(removal of minerals from human hair and animal keratin fibers by chelating agents)

IT 140-01-2, Pentasodium diethylenetriaminepentaacetate  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(removal of minerals from human hair and animal keratin fibers by chelating agents)

RN 140-01-2 HCPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, pentasodium salt (8CI, 9CI) (CA INDEX NAME)



●5 Na

L74 ANSWER 24 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
AN 1995:780753 HCPLUS  
DN 123:179535  
ED Entered STN: 08 Sep 1995  
TI Dentifrice compositions containing aluminum and carboxylic acid  
radicals for treatment of dentin hypersensitivity  
IN Nakajima, Seiji; Takahashi, Akinori; Suganuma, Nobuo; Ito, Satoshi  
PA Lion Corp, Japan  
SO Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM A61K007-16  
ICS A61K007-24  
CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 62  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 07165550	A2	19950627	JP 1994-75317	19940322
JP 2550909	B2	19961106		
PRAI JP 1994-75317		19940322		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 07165550	ICM	A61K007-16

## ICS A61K007-24

AB The title compns. for obstructing dentin canaliculi contain Al and carboxylic acid radicals (at 1:1 to > 6 mol ratio) as active ingredients in the dissolved state and phosphoric acid compds. to keep the pH > 5. A dentin disk was treated with an aqueous solution containing 0.5 weight% Al and lactic acid (mol. ratio to Al = 3) (by dissolving Al lactate and lactic acid) and 3.0 weight% Na tripolyphosphate (I) and passage of Ringer's solution through dentin canaliculi was reduced by 99% vs. 20% for a control solution containing no I.

ST dentin canaliculus obstruction aluminum carboxylate; hypersensitivity dentin inhibition dentifrice aluminum carboxylate

IT Dentifrices  
Mouthwashes  
(dentifrices containing Al carboxylates and phosphorus acid compds. or oxalic acid compds. for treatment of dentin hypersensitivity)

IT Carboxylic acids, biological studies  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dentifrices containing Al carboxylates and phosphorus acid compds. or oxalic acid compds. for treatment of dentin hypersensitivity)

IT Tooth  
(disease, hyperesthesia, dentifrices containing Al carboxylates and phosphorus acid compds. or oxalic acid compds. for treatment of dentin hypersensitivity)

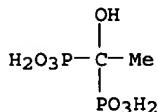
IT Polyphosphoric acids  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sodium salts, dentifrices containing Al carboxylates and phosphorus acid compds. or oxalic acid compds. for treatment of dentin hypersensitivity)

IT 57-03-4 62-76-0, Sodium oxalate 83-86-3, Phytic acid 815-78-1, Aluminum tartrate 1113-38-8, Ammonium oxalate 2466-09-3, Pyrophosphoric acid 2809-21-4, Ethane-1-hydroxy-1,1-diphosphonic acid 7558-79-4, Disodium hydrogen phosphate 7558-80-7, Sodium dihydrogen phosphate 7664-38-2, Phosphoric acid, biological studies 7722-88-5 7757-93-9, Calcium hydrogen phosphate 7758-29-4, Sodium tripolyphosphate 7778-77-0, Potassium dihydrogen phosphate 10043-22-8, Potassium oxalate 10380-08-2, Tripolyphosphoric acid 14306-25-3 18694-07-0, Hexametaphosphoric acid 18917-91-4, Aluminum lactate 31142-56-0, Aluminum citrate 39951-36-5, Sodium glycerophosphate 67400-84-4, Aluminum malate 104469-31-0 150677-49-9  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dentifrices containing Al carboxylates and phosphorus acid compds. or oxalic acid compds. for treatment of dentin hypersensitivity)

IT 2809-21-4, Ethane-1-hydroxy-1,1-diphosphonic acid  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dentifrices containing Al carboxylates and phosphorus acid compds. or oxalic acid compds. for treatment of dentin hypersensitivity)

RN 2809-21-4 HCPLUS

CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L74 ANSWER 25 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:557437 HCPLUS  
 DN 117:157437  
 ED Entered STN: 17 Oct 1992  
 TI Improved antiplaque compositions comprising a combination of morpholinoamino alcohol and chelating agent  
 IN Pan, Pauline H.; Sturdivant, Linda D.  
 PA Warner-Lambert Co., USA  
 SO PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English

IC ICM A61K007-16  
 CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9207548	A1	19920514	WO 1991-US6836	19910920
	W: AU, CA, FI, JP, KR, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5147632	A	19920915	US 1990-606218	19901031
	AU 9187397	A1	19920526	AU 1991-87397	19910920
	ZA 9108639	A	19920826	ZA 1991-8639	19911030
PRAI	US 1990-606218	A	19901031		
	WO 1991-US6836	A	19910920		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 9207548	ICM	A61K007-16

OS MARPAT 117:157437

AB The title composition contains a morpholinoamino alc., e.g. 3-(4-propylheptyl)-4-(2-hydroxyethyl)morpholine (I), and a chelating agent, e.g. EDTA. A mouthwash contained I.HCl 0.05, EDTA 0.20, nonionic surfactant 0.70, 70% sorbitol solution 50.0, EtOH 10.0, colors 0.0004, flavors 0.15 and water to 100%.

ST morpholinoamino alc chelator antiplaque dentifrice; EDTA morpholinoamino alc antiplaque mouthwash

IT Chelating agents  
 (antiplaque composition containing morpholinoamino alc. and)

IT Dentifrices

Mouthwashes

(antiplaque, morpholinoamino alc. and chelating agents in)

IT Dentifrices  
 (chewing gums, antiplaque, morpholinoamino alc. and chelating agents in)

IT Gingiva  
 (disease, gingivitis, treatment of, with antiplaque composition containing morpholinoamino alc. and chelating agents)

IT Polyphosphoric acids

RL: BIOL (Biological study)

(sodium salts, antiplaque dentifrices containing morpholinoamino alc. and)

IT 50-78-2D, Acetylsalicylic acid, salts with morpholinoamino alc.  
 57-10-3D, Hexadecanoic acid, salts with morpholinoamino alc.  
 Stearic acid, salts with morpholinoamino alc.  
 62-23-7D, p-Nitrobenzoic acid, salts with morpholinoamino alc.  
 64-19-7D, Acetic acid, salts with morpholinoamino alc.  
 65-85-0D, Benzoic acid, salts with morpholinoamino alc.  
 67-52-7D, Barbituric acid, salts with morpholinoamino alc.

69-72-7D, Salicylic acid, salts with morpholinoamino alc.  
 87-69-4D, salts with morpholinoamino alc.  
 89-86-1D, salts with morpholinoamino alc.

110-15-6D, Succinic acid, salts with morpholinoamino alc.  
 112-80-1D, Oleic acid, salts with morpholinoamino alc.  
 121-57-3D, salts with morpholinoamino alc.  
 143-07-7D, Lauric acid, salts with morpholinoamino alc.  
 144-62-7D, Oxalic acid, salts with morpholinoamino alc.

149-91-7D, Gallic acid, salts with morpholinoamino alc.  
 544-63-8D, Myristic acid, salts with morpholinoamino alc.  
 6915-15-7D, salts with morpholinoamino alc.  
 7601-90-3D, Perchloric acid, salts with morpholinoamino alc.  
 7647-01-0D, Hydrochloric acid, salts with morpholinoamino alc.  
 7664-38-2D, Phosphoric acid, salts with morpholinoamino alc.  
 10043-35-3D, Boric acid, salts with morpholinoamino alc.  
 98092-92-3

RL: BIOL (Biological study)

(antiplaque composition containing chelating agents and)

IT 64-17-5, Ethanol, biological studies

RL: BIOL (Biological study)

(antiplaque composition containing chelating agents and morpholinoamino alc.  
 and)

IT 79874-76-3

RL: BIOL (Biological study)

(antiplaque dentifrices containing chelating agents and)

IT 52-67-5, Penicillamine 60-00-4, EDTA, biological studies 62-33-9,

Calcium EDTA 67-43-6, Pentetic acid

68-04-2, Sodium citrate 70-51-9 87-69-4, biological studies

112-24-3, Trientine 118-92-3, Anthranilic acid 139-33-3, Disodium EDTA

148-18-5 150-38-9, Trisodium EDTA 304-55-2 527-07-1, Sodium

gluconate 7379-28-4 7429-90-5D, Aluminum, salts

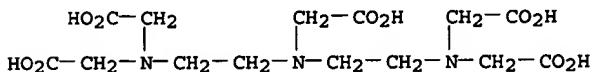
7722-88-5 7758-29-4, Sodium tripolyphosphate 9003-01-4, Poly(acrylic

acid) 13598-36-2D, Phosphonic acid, salts

RL: BIOL (Biological study)

IT 67-43-6, Pentetic acid 7429-90-5D,  
 Aluminum, salts  
 RL: BIOL (Biological study)  
 (antiplaque dentifrices containing morpholinoamino alc. and)

RN 67-43-6 HCAPLUS  
 CN Glycine, N,N-bis[2- [bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)



RN 7429-90-5 HCAPLUS  
 CN Aluminum (8CI, 9CI) (CA INDEX NAME)

A1

L74 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:411964 HCAPLUS  
 DN 113:11964  
 ED Entered STN: 06 Jul 1990  
 TI Tartar-inhibiting oral compositions containing fluoride,  
 phosphorus-containing compounds and carboxyvinyl polymers  
 IN Amjad, Zahid  
 PA Goodrich, B. F., Co., USA  
 SO Eur. Pat. Appl., 20 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM A61K007-16  
 CC 62-7 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 1, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 341662	A2	19891115	EP 1989-108325	19890509
EP 341662	A3	19910424		
US 4892724	A	19900109	US 1988-191668	19880509
AU 8934563	A1	19891109	AU 1989-34563	19890509
AU 628817	B2	19920924		
CN 1038933	A	19900124	CN 1989-104287	19890509
JP 02056414	A2	19900226	JP 1989-115948	19890509
PRAI US 1988-191668	A	19880509		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 341662	ICM	A61K007-16

AB Tartar-inhibiting oral compns. contain a fluoride, a dental abrasive, and an anticalculus agent which is a mixture of .gtoreq.1 P-containing compound and .gtoreq.1 carboxylic polymer. Data are given showing that mixts. of a P-containing compound and a polymer exhibit synergistic results in terms of hydroxyapatite inhibition. Polymers which showed superior synergism included acrylic acid-methacrylic acid-tert-butylacrylamide polymer, 2-acrylamidomethylpropanesulfonic acid-acrylic acid polymer and poly(maleic acid). Superior P-containing compds. included aminotri(methylenephosphonic acid), hydroxyethane-1,1-diphosphonic acid, and 2-phosphonobutane-1,2,4-tricarboxylic acid.

ST tartar inhibitor oral; phosphorus compd tartar inhibitor compn; carboxyvinyl polymer tartar inhibitor compn; calculus inhibition phosphorus compd polymer

IT Acrylic polymers, biological studies  
 RL: BIOL (Biological study)  
 (oral compns. containing phosphorus-containing compds. and, tartar-inhibiting)

IT Dentifrices  
 (tartar-inhibiting, phosphorus-containing compds. and carboxyvinyl polymers  
 in)

IT Tooth  
 (disease, calculus, inhibitors, oral compns. containing carboxyvinyl polymers and phosphorus compds. as)

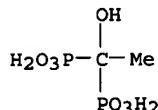
IT 2809-21-4 6419-19-8, Aminotri(methylene phosphonic acid)  
7723-14-0D, Phosphorus, compds. 37971-36-1, 2-Phosphonobutane-1,2,4-  
tricarboxylic acid  
RL: BIOL (Biological study)  
(oral compns. containing carboxyvinyl polymers and, for tartar and  
hydroxyapatite formation inhibition)

IT 9003-01-4, Polyacrylic acid 26099-09-2, Polymaleic acid 39373-34-7,  
Acrylic acid-hydroxypropylacrylate copolymer 40623-75-4, Acrylic  
acid-2-acrylamido-2-methylpropanesulfonic acid copolymer 62152-03-8,  
Acrylic acid-2-sulfoethylmethacrylate copolymer 97222-49-6, Acrylic  
acid-dimethyl itaconate copolymer 107532-52-5 109973-46-8, Acrylic  
acid-tert-butylacrylamide-methacrylic acid polymer 115635-04-6  
126816-65-7  
RL: BIOL (Biological study)  
(oral compns. containing phosphorus compds. and, for tartar and  
hydroxyapatite formation inhibition)

IT 7631-86-9, Silica, biological studies 7681-49-4, Sodium fluoride,  
biological studies 7783-47-3, Stannous fluoride 10163-15-2, Sodium  
monofluorophosphate 16984-48-8, Fluoride, biological studies  
21645-51-2, Aluminum hydroxide, biological studies  
RL: BIOL (Biological study)  
(oral compns. containing, tartar-inhibiting)

IT 2809-21-4  
RL: BIOL (Biological study)  
(oral compns. containing carboxyvinyl polymers and, for tartar and  
hydroxyapatite formation inhibition)

RN 2809-21-4 HCAPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L74 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1985:583397 HCAPLUS  
 DN 103:183397  
 ED Entered STN: 30 Nov 1985  
 TI Toothpaste containing thickening and antinucleating agents  
 IN De Vries, Marijke S.  
 PA Colgate-Palmolive Co., USA  
 SO Ger. Offen., 21 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM A61K007-16  
 CC 62-7 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3445855	A1	19850711	DE 1984-3445855	19841215
	US 4569838	A	19860211	US 1984-670385	19841114
	SE 8406184	A	19850624	SE 1984-6184	19841206
	SE 457603	B	19890116		
	SE 457603	C	19890615		
	ZA 8409647	A	19860730	ZA 1984-9647	19841211
	AU 8436688	A1	19850627	AU 1984-36688	19841214
	AU 562649	B2	19870618		
	DK 8406044	A	19850624	DK 1984-6044	19841217
	FR 2556961	A1	19850628	FR 1984-19285	19841217
	FR 2556961	B1	19880624		
	FI 8404993	A	19850624	FI 1984-4993	19841218
	FI 77777	B	19890131		
	FI 77777	C	19890510		
	BR 8406561	A	19851015	BR 1984-6561	19841219
	AT 8404021	A	19881115	AT 1984-4021	19841219
	AT 388292	B	19890526		
	CH 662054	A	19870915	CH 1984-6156	19841220
	BE 901362	A1	19850621	BE 1984-214221	19841221
	NO 8405197	A	19850624	NO 1984-5197	19841221
	NO 164513	B	19900709		
	NO 164513	C	19901017		

NL 8403895	A	19850716	NL 1984-3895	19841221
GB 2151922	A1	19850731	GB 1984-32394	19841221
GB 2151922	B2	19870624		
CA 1245562	A1	19881129	CA 1984-470824	19841221
JP 60178808	A2	19850912	JP 1984-272723	19841224
PRAI US 1983-564965	A	19831223		
US 1984-670385	A	19841114		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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DE 3445855	ICM	A61K007-16
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AB Toothpastes with good rheol. properties contain mixed thickening agents 0.5-5, aqueous humectants 20-80, polishing agents 10-50, and antinucleating agents 0.1-10%. The mixed thickening agents with a yield point viscosity of 3000-50,000 dyne/cm<sup>2</sup> consist of .iota.-carrageenan [9062-07-1] and xanthan gum [11138-66-2] in a ratio of 1:7.5 to 1:1.5. The polishing agents consist of alkali aluminosilicates and the antinucleating agents consist of phosphonic acid derivs. containing .gtoreq.1 phosphonic group, e.g., ethylenediaminetetramethylenetetraphosphonic acid (I) [1429-50-1]. The toothpaste can be used in a flexible tube, a mech. or pressure-differential dispenser. Thus, a toothpaste contained glycerin 25.0, xanthan gum 1.1, .iota.-carrageenan 0.2, Na saccharin 0.2, NaOBz 0.5, TiO<sub>2</sub> 0.4, NaF 0.22, I Na salt [22036-77-7] 2.75, 1% Al2O3-silicic acid 27.0, Na lauryl sulfate 1.50, flavoring agent 1.0, and H<sub>2</sub>O 40.13 parts. The resulting toothpaste was delivered with creamy consistency from a dispenser. After 1 wk it showed a compressive yield point viscosity of 3400 dyne/cm<sup>2</sup>.

ST toothpaste antinucleating agent; thickener toothpaste; polishing agent toothpaste

IT Dentifrices

(antinucleating and polishing and thickening agents for)

IT Thickening agents

(for toothpastes)

IT Chelating agents

(phosphonates, toothpaste containing)

IT Aluminosilicates, biological studies

RL: BIOL (Biological study)

(toothpaste containing)

IT 1429-50-1 9062-07-1 11138-66-2 22036-77-7

RL: BIOL (Biological study)

(toothpaste containing)

IT 1343-98-2

RL: BIOL (Biological study)

(toothpaste containing aluminum oxide and)

IT 1344-28-1, biological studies

RL: BIOL (Biological study)

(toothpaste containing silicic acid and)

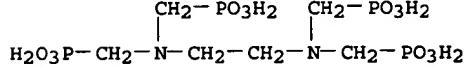
IT 1429-50-1

RL: BIOL (Biological study)

(toothpaste containing)

RN 1429-50-1 HCPLUS

CN Phosphonic acid, [1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis- (9CI)  
(CA INDEX NAME)



L74 ANSWER 28 OF 28 HCPLUS COPYRIGHT 2004 ACS on STN

AN 1974:558616 HCPLUS

DN 81:158616

ED Entered STN: 12 May 1984

TI Dandruff control preparations

IN Busch, Peter; Giede, Karl

PA Henkel und Cie. G.m.b.H.

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

IC A61K

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 2262375	A1	19740627	DE 1972-2262375	19721220
	DE 2262375		B2	19760819	
PRAI	DE 1972-2262375	A			

## CLASS

## PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

DE 2262375 IC A61K

AB Hair prepns. of pH 6.5-7.0, e.g. shampoos, lotions, or setting compns. with antidandruff activity contained Zn or Zr pyrithione(I), an amine, and a complex-forming agent binding >230 mg CaCO<sub>3</sub>/g in addition to conventional components. Thus, a setting agent contained Luviskol VA 37 I 4, isopropyl alc. 37, perfume oil 0.1, Eumulgin 286 0.3, Genamin KS 5 0.3, Polydiol 400 0.2, Uvinul 0.05, I 1.0, polyethylenimine (mol. weight 1200) 3, nitrilotriacetic acid 2.5, and H<sub>2</sub>O balance to 100%.

ST dandruff shampoo zinc pyrithione; hair prepns dandruff; zirconium pyrithione dandruff

IT Hair  
(antidandruff prepns. for, pyrithiones in)

IT Shampoos  
(antidandruff, containing pyrithiones)

IT Dandruff  
(control of, pyrithione prepns. for)

IT 12390-74-8 13463-41-7  
RL: BIOL (Biological study)  
(in antidandruff prepns.)

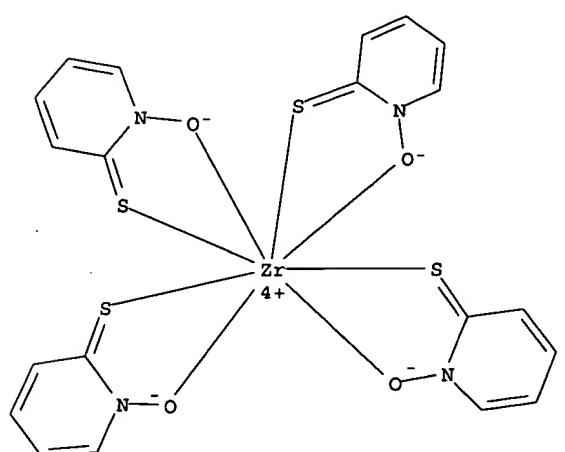
IT 60-00-4, uses and miscellaneous 139-13-9 2809-21-4  
RL: BIOL (Biological study)  
(in pyrithione antidandruff prepns.)

IT 929-06-6 9002-98-6  
RL: BIOL (Biological study)  
(solvents, for pyrithione antidandruff prepns.)

IT 12390-74-8  
RL: BIOL (Biological study)  
(in antidandruff prepns?)

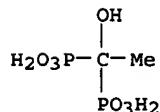
RN 12390-74-8 HCAPLUS

CN Zirconium, tetrakis[1-(hydroxy-.kappa.O)-2(1H)-pyridinethionato-.kappa.S<sup>2-</sup>]-  
(9CI) (CA INDEX NAME)



IT 2809-21-4  
RL: BIOL (Biological study)  
(in pyrithione antidandruff prepns.)

RN 2809-21-4 HCAPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



=> b home  
FILE 'HOME' ENTERED AT 12:43:39 ON 28 DEC 2004

=>

=> d his

(FILE 'HOME' ENTERED AT 09:15:38 ON 28 DEC 2004)

FILE 'HCAPLUS' ENTERED AT 09:15:50 ON 28 DEC 2004

L1 1 US20010046479/PN  
 E UK2000-1130/AP, PRN  
 E GB2000-1130/AP, PRN  
 L2 1 GB2000-1130/AP, PRN  
 E GB2000-1131/AP, PRN  
 L3 1 GB2000-1131/AP, PRN  
 L4 1 L1-3

FILE 'REGISTRY' ENTERED AT 09:17:37 ON 28 DEC 2004

FILE 'HCAPLUS' ENTERED AT 09:17:40 ON 28 DEC 2004  
 L5 TRA L4 1- RN : 8 TERMS

FILE 'REGISTRY' ENTERED AT 09:17:40 ON 28 DEC 2004  
 L6 8 SEA L5

FILE 'WPIX' ENTERED AT 09:17:44 ON 28 DEC 2004

L7 1 US20010046479/PN  
 E GB2000-1130/AP, PRN  
 L8 1 GB2000-1130/AP, PRN  
 L9 1 GB2000-1131/AP, PRN  
 L10 1 L7-9

FILE 'REGISTRY' ENTERED AT 09:34:04 ON 28 DEC 2004

L11 1 ALUMINUM/CN  
 L12 1 ZIRCONIUM/CN  
 L13 QUE (PMS OR MAN OR IDS)/CI OR COMPD OR COMPOUND OR UNSPECIFIED  
 L14 2 C18H30N4O12 AND TTHA NOT L13  
 L15 10 C14H23N3O10 AND (DTPA OR DETPA) NOT L13  
 L16 9 L15 NOT (NC=4 OR AMMONIUM (1A) HYDROGEN (1A) CARBONATE)  
 L17 7 L16 NOT 4 (1A) AMINOBENZOATE  
 E DTPMP/CN  
 L18 1 DTPMP/CN  
 E EDHP/CN  
 E EDTMP/CN  
 L20 1 EDTMP/CN  
 L21 1 C6H20N2O12P4 AND EDTMP  
 E EDDS/CN  
 E EDDHA/CN  
 L22 1 EDDHA/CN  
 L23 2 C18H20N2O6 AND EDDHA  
 L24 42 C10H28N2O12P4  
 L25 38 L24 AND PHOSPHONIC (1A) ACID  
 L26 27 L25 AND HEXANEDIYL  
 L27 23 L26 NOT (L13 OR MXS/CI)  
 L28 4 L26 NOT L27  
 L29 7066 C2H8N2  
 L30 71 L29 NOT L13 AND ETHYLENEDIAMINE  
 L31 478 C2H8O7P2  
 L32 347 L31 NOT L13  
 L33 333 L32 AND PHOSPHONIC (1A) ACID  
 L34 3 L33 AND ETHAN  
 SEL RN 2-3  
 L35 2 E1-2 AND L34  
 L36 316 L33 AND HYDROXYETHYL  
 L37 316 L35-36

FILE 'HCAPLUS' ENTERED AT 11:20:25 ON 28 DEC 2004

L38 QUE L11 OR ALUMINUM OR ALCOA OR ALCAN OR ALPASTE OR ALUMIPASTE  
 L39 QUE L12 OR ZIRCONIUM OR ZR  
 L40 QUE L14 OR L17 OR L19 OR L37 OR L21 OR L22  
 L41 516 TTHA OR CHELEST OR CLEWAT OR TRIETHYLENETETRAAMINEHEXACETIC (1A  
 L42 10320 ETHYLENEBIS (3A)CARBOXYMETHYL (1A) IMINO (1A) EHTYLENENITRILIO (1A  
 L43 707 DIETHYLENETRIAMINE (5A) PENTAACETIC (1A) ACID  
 L44 8510 (DIETHYLENETRIAMINEPENTAKIS (1A)ACETIC OR PENTETIC) (1A) ACID O  
 L45 1384 CIX OR CUBLEN OR DEQUEST OR DIETHYLTRIAMINE (5A) (PENTA OR PENT

FILE 'REGISTRY' ENTERED AT 11:39:02 ON 28 DEC 2004

L46 326849 AL/ELS  
 L47 135421 ZR/ELS

FILE 'HCAPLUS' ENTERED AT 11:39:16 ON 28 DEC 2004

L48           QUE L47

L49           457 EDITEMPA OR EDPA OR EDTF OR EDTMP OR EDTMPA OR EDTPA OR EDTPN O

L50           15 TETRAKIS (1A) PHOSPHONOMETHYL (1A) ETHYLENEDIAMINE OR ETHYLENEB

L51           931 CHEL OR DISSOLVINE OR EDBPFA OR EDDHA OR EDHPA OR ETHYLENE? (1A)

              E DEODOR/CT

              E E9+ALL

L52           8238 DEODORANTS+NT/CT

              E COATING MATERIALS/CT

              E E3+ALL

L53           317 COATING MATERIALS+OLD,NT/CT (L) (DEODOR? OR DEODOUR?)

              E DEODOR/CT

              E E9+ALL

              E E18+ALL

L54           510 AIR FRESHENERS/CT

              E E7+ALL

L55           25724 "ODOR AND ODOROUS SUBSTANCES"+OLD,NT/CT

              E E17

              E E3+ALL

L56           5609 DEODORIZER/CT

L57           1356 (L38 OR L39 OR L48) AND L52-56

L58           10 L57 AND (L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L49 OR L50 O

              E LANDA A/AU

L59           35 E3,E10

              E LANDA ANDREW/AU

L60           8 E4-5

              E MAKIN S/AU

L61           10 E4,E11-12

              E MCKAY V/AU

L62           3 E3,E6

              E MC KAY V/AU

L63           10998 UNILEVER/CS,PA

L64           2 L58 AND L59-63

L65           8 L58 NOT L64

              SEL AN 1 3-8

L66           7 E1-14 AND L65

L67           4577 (L38 OR L39 OR L48) AND COSMET?/CC,SX

L68           33 L67 AND (L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L49 OR L50 O

L69           3 L68 AND L59-63

L70           3 L64 OR L69

L71           30 L68 NOT L70

L72           26 L71 NOT L65

              SEL AN 1-21

L73           21 E15-55 AND L72

L74           28 L66 OR L73

L75           1913 (L38 OR L39 OR L48) AND (L40 OR L41 OR L42 OR L43 OR L44 OR L45

L76           1704 L75 AND (PY<=2000 OR AY<=2000 OR PRY<=2000)

L77           411 L76 AND P/DT

L78           186 L77 AND US/PC

L79           52 L77 AND US/PC.B

              SEL AN L79 2 6 13 30 32

L80           5 E56-65 AND L79

=> b hcap

FILE 'HCAPLUS' ENTERED AT 13:45:23 ON 28 DEC 2004  
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FILE COVERS 1907 - 28 Dec 2004 VOL 142 ISS 1  
 FILE LAST UPDATED: 24 Dec 2004 (20041224/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all:480 tet

L80 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:912824 HCAPLUS  
 DN 140:9216  
 ED Entered STN: 21 Nov 2003  
 TI Regeneration of spent supported metal catalysts  
 IN Zhou, Bing; Rueter, Michael  
 PA USA  
 SO U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. Ser. No. 745,510.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM B01J038-50  
 NCL 502022000; 502029000  
 CC 67-4 (Catalysis, Reaction Kinetics, and Inorganic Reaction Mechanisms)  
 Section cross-reference(s): 49, 78

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003216245	A1	20031120	US 2002-326042	20021220 <--
	US 2002115554	A1	20020822	US 2000-745510	20001222 <--
	US 6740615	B2	20040525		
	WO 2004060553	A1	20040722	WO 2003-US9216	20030325
	W: AT, CA, CN, IN, JP, MX				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
PRAI	US 2000-745510	A2	20001222	<--	
	US 2002-326042	A	20021220		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003216245	ICM	B01J038-50
	NCL	502022000; 502029000
US 2002115554	ECLA	G02C007/04C

AB A method for regenerating spent supported metal catalysts comprising treating the spent catalyst with an organo-metallic complex forming agent having an ionization constant  $pK_1$  of at least 2.5. The catalyst activity is restored to an activity level near to or greater than the fresh catalyst. The regeneration method is particularly useful for regenerating spent palladium catalysts on an alumina support as utilized for the hydrogenation of Et anthraquinone (EAQ) in the production of hydrogen peroxide.

ST regeneration spent supported metal catalyst; palladium alumina catalyst regeneration hydrogenation ethyl anthraquinone; hydrogen peroxide prodn palladium alumina catalyst regeneration

IT Amines, processes  
 Amino acids, processes  
 Mannich bases  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (aliphatic and aromatic; regeneration of spent supported metal catalysts)

IT Polybenzimidazoles  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (chelating agent; regeneration of spent supported metal catalysts)

IT Carboxylic acids, processes  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (monobasic, dibasic, aliphatic or aromatic, chelating agent; regeneration of spent supported metal catalysts)

IT Polycarbonates, processes  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (polybibiphenol, chelating agent; regeneration of spent supported metal catalysts)

IT Catalysts  
 Chelating agents  
 Complexing agents  
 (regeneration of spent supported metal catalysts)

IT Alkali metals, uses  
 Alkaline earth metals  
 Alloys, uses  
 Bentonite, uses  
 Carbon black, uses

Clays, uses  
 Diatomite  
 Group IIIA elements  
 Group VA elements  
 Main group elements  
 Metals, uses  
 Noble metals  
 Nonmetals  
 Polymers, uses  
 Semimetals  
 Transition metals, uses  
 Zeolites (synthetic), uses  
 RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
 (regeneration of spent supported metal catalysts)  
 IT Organometallic compounds  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (regeneration of spent supported metal catalysts)  
 IT Carboxylic acids, processes  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (tricarboxylic acids, aliphatic or aromatic, chelating agent; regeneration of spent supported metal catalysts)  
 IT 7440-44-0, Activated carbon, uses  
 RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
 (activated and fluoridated; regeneration of spent supported metal catalysts)  
 IT 56-40-6, Glycine, processes 56-40-6D, Glycine, salts 67-43-6,  
 Diethylenetriamine pentaacetic acid  
 67-43-6D, Diethylenetriamine pentaacetic acid, salts 69-72-7, Salicylic acid, processes 69-72-7D,  
 Salicylic acid, salts 77-92-9, Citric acid, processes 77-92-9D, Citric acid, salts 78-90-0, Propylenediamine, salts 79-14-1, Glycolic acid, processes 79-14-1D, Glycolic acid, salts 87-69-4, Tartaric acid, processes 87-69-4D, Tartaric acid, salts 107-15-3, Ethylenediamine, processes 107-15-3D, Ethylenediamine, salts 110-15-6, Succinic acid, processes 110-15-6D, Succinic acid, salts 110-94-1, Glutaric acid 110-94-1D, Glutaric acid, salts 111-40-0, Diethylenetriamine 111-40-0D, Diethylenetriamine, salts 112-24-3 112-24-3D, salts 118-92-3, 2-Aminobenzoic acid 118-92-3D, 2-Aminobenzoic acid, salts 121-91-5, Isophthalic acid, processes 121-91-5D, Isophthalic acid, salts 141-82-2, Malonic acid, processes 141-82-2D, Malonic acid, salts 150-39-0, N-(Hydroxyethyl)ethylenediaminetriacetic acid, salts 6419-19-8, Amino tri(methylenephosphonic acid) 9003-01-4D, Polyacrylic acid, derivs. 9003-39-8, Polyvinylpyrrolidone 15477-76-6, Phosphonate 15827-60-8 15827-60-8D, salts 24991-32-0, Polyvinylbenzoate 25013-01-8, Polypyridine 25087-26-7D, Polymethacrylic acid, derivs. 25191-25-7, Polyvinylsulfate 26101-52-0  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (chelating agent; regeneration of spent supported metal catalysts)  
 IT 50674-60-7, Ethyl anthraquinone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (hydrogenation of; regeneration of spent supported metal catalysts)  
 IT 1309-48-4, Magnesia, uses 1314-23-4, Zirconia, uses 1344-28-1, Alumina, uses 7429-90-5, Aluminum, uses 7439-88-5, Iridium, uses 7439-89-6, Iron, uses 7439-91-0, Lanthanum, uses 7439-92-1, Lead, uses 7439-93-2, Lithium, uses 7439-95-4, Magnesium, uses 7439-96-5, Manganese, uses 7439-98-7, Molybdenum, uses 7440-02-0, Nickel, uses 7440-04-2, Osmium, uses 7440-05-3, Palladium, uses 7440-06-4, Platinum, uses 7440-09-7, Potassium, uses 7440-15-5, Rhenium, uses 7440-16-6, Rhodium, uses 7440-18-8, Ruthenium, uses 7440-20-2, Scandium, uses 7440-21-3, Silicon, uses 7440-22-4, Silver, uses 7440-23-5, Sodium, uses 7440-31-5, Tin, uses 7440-32-6, Titanium, uses 7440-33-7, Tungsten, uses 7440-36-0, Antimony, uses 7440-38-2, Arsenic, uses 7440-41-7, Beryllium, uses 7440-42-8, Boron, uses 7440-45-1, Cerium, uses 7440-47-3, Chromium, uses 7440-48-4, Cobalt, uses 7440-50-8, Copper, uses 7440-55-3, Gallium, uses 7440-56-4, Germanium, uses 7440-57-5, Gold, uses 7440-62-2, Vanadium, uses 7440-66-6, Zinc, uses 7440-69-9, Bismuth, uses 7440-70-2, Calcium, uses 7440-74-6, Indium, uses 7553-56-2, Iodine, uses 7631-86-9, Silica, uses 7704-34-9, Sulfur, uses 7723-14-0, Phosphorus, uses 7726-95-6, Bromine, uses 7727-37-9, Nitrogen, uses 7782-41-4,

Fluorine, uses 7782-42-5, Graphite, uses 7782-44-7, Oxygen, uses 7782-49-2, Selenium, uses 7782-50-5, Chlorine, uses 13463-67-7, Titania, uses 13494-80-9, Tellurium, uses  
 RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
 (regeneration of spent supported metal catalysts)

IT 7722-84-1P, Hydrogen peroxide, preparation  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (regeneration of spent supported metal catalysts)

L80 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:941799 HCAPLUS

DN 138:28597

ED Entered STN: 12 Dec 2002

TI Method for processing returns from oil and gas wells that have been treated with introduced fluids

IN Lin, Huei-Nan; Martin, Rodney Davis; Brown, James M.; Brock, Gene F.; Perkins, Randall J.

PA BJ Services Company, USA

SO U.S., 14 pp., Cont.-in-part of Ser. No. US 1997-984939, filed on 4 Dec 1997, now

CODEN: USXXAM

DT Patent

LA English

IC ICM C02F009-00

NCL 210666000; 210668000; 210669000; 210693000; 210708000; 210747000

CC 60-3 (Waste Treatment and Disposal)

Section cross-reference(s): 51

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6491824	B1	20021210	US 1998-207786	19981209 <--
	US 6132619	A	20001017	US 1997-984939	19971204 <--
PRAI	US 1996-32778P	P	19961205	<--	
	US 1997-984939	A2	19971204	<--	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
	US 6491824	ICM	C02F009-00	
		NCL	210666000; 210668000; 210669000; 210693000; 210708000; 210747000	
US	6491824	ECLA	B01D017/00+/02F+/04J+/08B	<--
US	6132619	ECLA	B01D017/00+/02F+/04J+/08B	<--

AB A method for resolving sludge/emulsion formed as a result of adding introduced fluids to oil and gas wells. The method comprises adding a water-dispersible emulsion breaker and/or adjunct additives that may include iron-control chems., scale-control chems., or paraffin-control chems. or combinations thereof in amts. sufficient to sep. the sludge/emulsion into an oil phase and a water phase and to control iron, scale, or paraffin in the oil phase. Further treatment of water phase includes treatment with water clarifiers, allowing the water phase to remain in settling vessels, and passing the water phase through a macroreticular resin resulting in water that is environmentally acceptable for disposal.

ST oil gas well returns treatment iron scale paraffin control; thioglycolic acid iron control returns treatment; dodecylbenzylsulfonic acid sodium xylenesulfonate emulsion breaker returns treatment; polyacrylic acid returns clarification macroreticular resin filtration

IT Well treatment fluids  
 (Method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Esters, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(alkyl; paraffin-control chemical; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Alcohols, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(amino, water clarifier; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Surfactants  
 (anionic cationic and nonionic; emulsion breaker; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Polyamines  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (as water clarifier; phosphonic acid derivs. as scale inhibitor; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Chemistry  
 (chemical compds., epoxylated and propoxylated; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Wastewater treatment  
 (clarification; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Polymers, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (co-, containing phosphinol group; scale inhibitor; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Polyoxyalkylenes, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (copolymers containing; paraffin-control chemical; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Membrane filters  
 (cotton or synthetic cloth; for prefiltration; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Emulsions  
 (demulsifiers; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Epoxy resins, processes  
 Phenolic resins, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (emulsion breaker; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Wastewater treatment  
 (filtration; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Chelating agents  
 (iron-control chems.; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Drilling fluids  
 Scale inhibitors  
 (method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT Scale (deposits)  
 (prevention; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT 68585-97-7, Dodecylbenzylsulfonic acid  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (emulsion breaker and/or paraffin-control agent; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT 1300-72-7, Sodium Xylenesulfonate  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (emulsion breaker; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT 68-11-1, Thioglycolic acid, processes 139-13-9D, Nitrilotriacetic acid, sodium or potassium salts 139-33-3 150-39-0D, HEDTA, sodium or potassium salts 7631-90-5, Sodium bisulfite 7773-03-7, Potassium bisulfite. 10192-30-0, Ammonium bisulfite 53404-51-6, Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, monopotassium salt  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (iron-control agent; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT 15181-46-1D, Bisulfite, salts  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (iron-reducing agent; method for processing returns from oil and gas wells that have been treated with introduced fluids)

IT 9060-05-3, Amberlite XAD-2  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (macroreticular filter resin; method for processing returns from oil  
 and gas wells that have been treated with introduced fluids)

IT 14265-44-2D, Phosphate, esters  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); PROC (Process)  
 (organic; scale inhibitor; method for processing returns from oil and gas  
 wells that have been treated with introduced fluids)

IT 100-87-8D, Benzenemethanesulfonic acid, dialkyl derivs. 9011-13-6,  
 Styrene maleic anhydride copolymer 10344-93-1D, Acrylate, alkyl derivs.  
 18358-13-9D, Methacrylate, alkyl derivs. 24937-78-8 28679-05-2D,  
 Eicosanol, polyacrylic esters  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); PROC (Process)  
 (paraffin-control chemical; method for processing returns from oil and gas  
 wells that have been treated with introduced fluids)

IT 2809-21-4 6419-19-8, Aminotri(methylenephosphonic) acid  
 37971-36-1, Phosphonobutanetricarboxylic acid  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); PROC (Process)  
 (scale inhibitor; method for processing returns from oil and gas wells  
 that have been treated with introduced fluids)

IT 15477-76-6D, Phosphonate, organic compds.  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); PROC (Process)  
 (scale inhibitors; method for processing returns from oil and gas wells  
 that have been treated with introduced fluids)

IT 79-06-1D, Acrylamide, polymers 79-10-7D, Acrylic acid, polymers  
 1327-41-9, Aluminum chlorohydrate 7398-69-8,  
 Diallyldimethylammonium chloride 7446-70-0, Aluminum chloride,  
 processes 9003-01-4, Polyacrylic acid 10043-01-3, Alum 19045-66-0,  
 Carbamothioic acid  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); PROC (Process)  
 (water clarifier; method for processing returns from oil and gas wells  
 that have been treated with introduced fluids)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Angbo, L; Water Supply 1991, V9, P87 HCAPLUS
- (2) Anon; EP 0432787 A1 1991 HCAPLUS
- (3) Anon; EP 901241604 1991
- (4) Anon; Summary Bulletin Amberlite Polymeric Adsorbents, Rohm and Haas  
 Company Technical Bulletin Fluid Process Chemicals 1978, P1
- (5) Bache, D; Water Supply 1991, V9, P93 HCAPLUS
- (6) Bellos; US 4818410 A 1989 HCAPLUS
- (7) Brezinski; US 5674817 A 1997 HCAPLUS
- (8) Chen, A; SPE Production Engineering 1991, P131 HCAPLUS
- (9) Durham; US 4855060 A 1989 HCAPLUS
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 HCAPLUS

L80 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:593292 HCAPLUS  
 DN 135:164175

ED Entered STN: 16 Aug 2001  
 TI Metal polychelants for diagnostic imaging  
 IN Sieving, Paul F.; Watson, Alan David; Quay, Steven C.; Rocklage, Scott Michael  
 PA Salutar, Inc., USA  
 SO U.S., 13 pp., Cont.-in-part of U.S. 5,554,748.  
 CODEN: USXXAM

DT Patent  
 LA English  
 IC ICM C07K001-00  
 NCL 530402000  
 CC 8-9 (Radiation Biochemistry)  
 Section cross-reference(s): 63

## FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6274713	B1	20010814	US 1995-473573	19950607 <--
	US 5554748	A	19960910	US 1993-175989	19931230 <--
PRAI	US 1989-335162	B2	19890407	<--	
	US 1993-175989	A2	19931230	<--	
	US 1990-464865	A3	19900116	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6274713	ICM	C07K001-00
	NCL	530402000
US 6274713	ECLA	A61K047/48R2T; A61K049/08Z; A61K049/12; A61K051/06Z; C08G069/48 <--
US 5554748	ECLA	A61K047/48K6; A61K049/00B6P; A61K049/00B10; A61K051/06Z; C08G069/48 <--

OS MARPAT 135:164175

AB Invention is directed to polychelants and their metal chelates which are useful in diagnostic imaging and nuclear medicine. The polychelants comprise a plurality of macrocyclic chelant moieties, e.g., DOTA residues, conjugated by thiourea, urea or glycinate linkages to a backbone moiety through a donor atom. For example, DOTA was reacted with tetramethylguanidine and iso-Bu chloroformate to give DOTA carboxylic anhydride, which upon treatment with mono-BOC-ethylenediamine yielded DOTA-N-(2-aminoethyl)amide. This was activated with thiophosgene, coupled with poly(L-lysine), and converted into a Gd complex. The Gd polychelate obtained was coupled to activated human serum albumin for use in diagnosis.

ST polychelate metal prep radiotherapy diagnosis imaging; polylysine metal chelate diagnosis imaging

IT Imaging agents  
 (NMR; polychelants for radiotherapy and diagnostic imaging)

IT Proteins, specific or class

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (SU (surface), erythrocyte; polychelants for radiotherapy and diagnostic imaging)

IT Functional groups  
 (alkoxycarbonyl groups; polychelants for radiotherapy and diagnostic imaging)

IT Carbohydrates, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (amino sugars; polychelants for radiotherapy and diagnostic imaging)

IT Antigens  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (antibodies specific for; polychelants for radiotherapy and diagnostic imaging)

IT Rare earth metals, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (complexes with polychelates, conjugates with biomols.; polychelants for radiotherapy and diagnostic imaging)

IT Albumins, biological studies  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (conjugates, with metal polychelates; polychelants for radiotherapy and diagnostic imaging)

IT Chelates  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (conjugates; polychelants for radiotherapy and diagnostic imaging)

IT Coordination compounds  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (cryptates; polychelants for radiotherapy and diagnostic imaging)

IT Polyamides, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (dendrimers; polychelants for radiotherapy and diagnostic imaging)

IT Fibrins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fragments, polymerized; polychelants for radiotherapy and diagnostic imaging)

IT Functional groups  
 (isothiocyanato group; polychelants for radiotherapy and diagnostic imaging)

IT Lipoproteins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (low-d., precursor; polychelants for radiotherapy and diagnostic imaging)

IT Heterocyclic compounds  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (macrocyclic, nitrogen; polychelants for radiotherapy and diagnostic imaging)

IT Liver  
 (macromols. specific for; polychelants for radiotherapy and diagnostic imaging)

IT Functional groups  
 (maleimide; polychelants for radiotherapy and diagnostic imaging)

IT Antibodies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (monoclonal, conjugates; polychelants for radiotherapy and diagnostic imaging)

IT Chelating agents  
 (pharmaceutical; polychelants for radiotherapy and diagnostic imaging)

IT Dendritic polymers  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polyamides; polychelants for radiotherapy and diagnostic imaging)

IT Amide group  
 Animal cell  
 Animal tissue  
 Blood vessel, disease  
 Diagnosis  
 Disulfide group  
 Drug delivery systems  
 Drug targeting  
 Imaging agents  
 Organ, animal  
 Radiotherapy  
 (polychelants for radiotherapy and diagnostic imaging)

IT Chelates  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (polychelants for radiotherapy and diagnostic imaging)

IT Antibodies  
 RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT  
 (Reactant or reagent); USES (Uses)  
 (polychelants for radiotherapy and diagnostic imaging)

IT Amyloid precursor proteins  
 Crown ethers  
 Fibrinogens  
 Macroyclic compounds  
 Proteins, general, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polychelants for radiotherapy and diagnostic imaging)

IT Proteins, specific or class  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (receptor-binding proteins; polychelants for radiotherapy and diagnostic imaging)

IT Albumins, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (serum; polychelants for radiotherapy and diagnostic imaging)

IT Erythrocyte  
 (surface proteins; polychelants for radiotherapy and diagnostic imaging)

IT Functional groups  
 (thiourea; polychelants for radiotherapy and diagnostic imaging)

IT 64987-85-5, SMCC  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (gadolinium polychelates activation by; polychelants for radiotherapy and diagnostic imaging)

IT 80-70-6 107-15-3, Ethylene diamine, reactions 463-71-8, Thiophosgene  
 543-27-1, Isobutylchloroformate 9011-14-7, Poly(methyl methacrylate)

22118-09-8, Bromoacetyl chloride 25104-18-1, Poly(L-lysine)  
 30551-89-4, Poly(allylamine) 38000-06-5, Poly(L-lysine) 56491-86-2,  
 NOTA 57260-73-8, mono-BOC-ethylenediamine 60239-18-1, DOTA  
 60239-22-7, TETA 64189-50-0D, Sarcophagine, derivs. 112193-74-5, OTTA  
 149440-35-7, DO3A  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (polychelants for radiotherapy and diagnostic imaging)

IT 67-43-6DP, DTPA, reaction with polylysine, complexes  
 with gadolinium, conjugates with serum albumin 25104-18-1DP, reaction  
 with DOTA and DTPA 60239-18-1DP, DOTA, reaction with  
 polylysine, complexes with gadolinium, conjugates with serum albumin  
 124098-81-3P 134246-35-8P 134314-84-4P 134314-85-5P 134314-87-7P  
 354153-84-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (polychelants for radiotherapy and diagnostic imaging)

IT 10138-52-0DP, Gadolinium trichloride, complexes with polychelates,  
 conjugates with biol. mols. 25104-18-1DP, Poly(L-lysine), reaction  
 products with DOTA derivs. and gadolinium 38000-06-5DP, Poly(L-lysine),  
 reaction products with DOTA derivs. and gadolinium 134246-35-8DP,  
 complexes with gadolinium, conjugates with serum albumin 134314-85-5DP,  
 reaction products with polylysine and gadolinium 134314-86-6DP, reaction  
 products with polylysine and gadolinium 134314-86-6P  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 (polychelants for radiotherapy and diagnostic imaging)

IT 7439-89-6D, Iron, complexes with polychelates, conjugates with biomols.,  
 biological studies 7439-92-1D, Lead element, complexes with  
 polychelates, conjugates with biomols. 7439-96-5D, Manganese, complexes  
 with polychelates, conjugates with biomols., biological studies  
 7439-97-6D, Mercury element, complexes with polychelates, conjugates with  
 biomols. 7440-04-2D, Osmium, complexes with polychelates, conjugates  
 with biomols. 7440-33-7D, Tungsten element, complexes with polychelates,  
 conjugates with biomols. 7440-48-4D, Cobalt, complexes with  
 polychelates, conjugates with biomols., biological studies 7440-58-6D,  
 Hafnium element, complexes with polychelates, conjugates with biomols.  
 7440-67-7D, Zirconium element, complexes with  
 polychelates, conjugates with biomols. 7440-69-9D, Bismuth element,  
 complexes with polychelates, conjugates with biomols. 10098-91-6D,  
 yttrium-90, complexes with polychelates, conjugates with biomols.,  
 biological studies 13981-25-4D, copper-64, complexes with polychelates,  
 conjugates with biomols., biological studies 13982-36-0D, yttrium-88,  
 complexes with polychelates, conjugates with biomols., biological studies  
 14133-76-7D, technetium-99, complexes with polychelates, conjugates with  
 biomols., biological studies 14378-26-8D, rhenium-188, complexes with  
 polychelates, conjugates with biomols., biological studies 14687-25-3D,  
 lead-203, complexes with polychelates, conjugates with biomols.,  
 biological studies 14733-03-0D, bismuth-214, complexes with  
 polychelates, conjugates with biomols., biological studies 14998-63-1D,  
 rhenium-186, complexes with polychelates, conjugates with biomols.,  
 biological studies 15229-37-5D, bismuth-211, complexes with  
 polychelates, conjugates with biomols., biological studies 15750-15-9D,  
 indium-111, complexes with polychelates, conjugates with biomols.,  
 biological studies 15757-14-9D, gallium-68, complexes with polychelates,  
 conjugates with biomols., biological studies 15757-86-5D, copper-67,  
 complexes with polychelates, conjugates with biomols., biological studies  
 15766-00-4D, samarium-153, complexes with polychelates, conjugates with  
 biomols., biological studies 15776-20-2D, bismuth-213, complexes with  
 polychelates, conjugates with biomols., biological studies 63413-08-1D,  
 Sepulchrate, derivs.  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polychelants for radiotherapy and diagnostic imaging)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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 HCPLUS
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- (8) Tomalia; US 5338532 1994 HCPLUS
- (9) Tomalia; US 5527524 1996 HCPLUS

AN 1995:278505 HCPLUS  
 DN 122:64461  
 ED Entered STN: 07 Jan 1995  
 TI Calcification-resistant materials and methods of making them through use  
 of multivalent cations  
 IN Levy, Robert J.; Sintov, Amnon  
 PA University of Michigan, The Board of Regents, USA  
 SO U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 515,484, abandoned.  
 CODEN: USXXAM

DT Patent  
 LA English  
 IC ICM A61L017-00  
 ICS C14C003-00; A61F002-06  
 NCL 008094110  
 CC 63-7 (Pharmaceuticals)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5368608	A	19941129	US 1991-689652	19910423 <--
	US 5094661	A	19920310	US 1988-176789	19880401 <--
	US 5746775	A	19980505	US 1993-140722	19931021 <--
	US 5679112	A	19971021	US 1994-345658	19941128 <--
PRAI	US 1988-176789	A2	19880401	<--	
	US 1990-515484	B2	19900430	<--	
	US 1991-689652	A2	19910423	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 5368608	ICM	A61L017-00
	ICS	C14C003-00; A61F002-06
	NCL	008094110
US 5368608	ECLA	A61L027/36; A61L027/50; A61L027/54
US 5746775	ECLA	A61L027/36; A61L027/50; A61L027/54
US 5679112	ECLA	A61L027/36; A61L027/50; A61L027/54

AB Bioprosthetic materials, either natural or synthetic, are treated with trivalent aluminum or iron cations, or salts, to prevent in vivo calcification. Such bioprosthetic materials include porcine aortic valve leaflets, bovine pericardium, aortic homografts, biocompatible elastomers, and the like which are intended for invasive, or in-dwelling use in a human or animal body. Simple incubation of the natural bioprosthetic materials in an ion-containing solution, such as aqueous AlCl<sub>3</sub> or FeCl<sub>3</sub>, prior to implantation has been found to inhibit calcification of the biomaterial over a prolonged period, and to do so without adverse side effects. Incorporation of an aluminum-containing compound into the formulation for polymers, such as polyurethane, has also been found to inhibit calcification with no adverse side effects.

ST calcification resistant biomaterial cation

IT Calcification

Cations

Prosthetic materials and Prosthetics

Transplant and Transplantation

(calcification-resistant materials and preparation using multivalent cations)

IT Polyamides, biological studies

Polycarbonates, biological studies

Polyesters, biological studies

Polysulfones, biological studies

Siloxanes and Silicones, biological studies

Urethane polymers, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(calcification-resistant materials and preparation using multivalent cations)

IT 77-92-9, Citric acid, biological studies 142-03-0 555-31-7,

Aluminum isopropoxide 555-35-1, Aluminum palmitate

637-12-7, Aluminum stearate 688-37-9, Aluminum

oleate 814-87-9, Aluminum oxalate 994-36-5, Sodium citrate

1327-43-1, Aluminum magnesium silicate 1335-30-4,

Aluminum silicate 1344-28-1, Aluminum oxide,

biological studies 2809-21-4, EHDP 7446-70-0, Aluminum

chloride, biological studies 7705-08-0, Ferric chloride, biological

studies 7784-22-7, Aluminum hypophosphite 7784-30-7,

Aluminum phosphate 9002-84-0, PTFE 9002-86-2, PVC 9002-88-4,

Polyethylene 9003-07-0, Polypropylene 9003-53-6, Polystyrene

9004-35-7, Cellulose acetate 9011-14-7, Polymethyl methacrylate

9016-00-6, Polydimethylsiloxane 10024-42-7, Aluminum sodium

sulfate 10043-01-3, Aluminum sulfate 13473-90-0,

Aluminum nitrate 15007-61-1, Aluminum potassium sulfate 15477-33-5, Aluminum chloride 18917-91-4, Aluminum lactate 21645-51-2, Aluminum hydroxide, biological studies 24937-78-8, EVA 40391-99-9  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (calcification-resistant materials and preparation using multivalent cations)

L80 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:404155 HCAPLUS  
 DN 121:4155  
 ED Entered STN: 09 Jul 1994  
 TI Radiolabeled compositions containing a calcific matrix and their use for treatment of rheumatoid arthritis  
 IN McMillan, Kenneth; Simon, Jaime  
 PA Dow Chemical Co., USA  
 SO U.S., 7 pp. Cont.-in-part of U.S. 5,137,709.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A61K043-00  
 ICS A61M036-14; A61N005-00  
 NCL 424001290  
 CC 8-9 (Radiation Biochemistry)  
 Section cross-reference(s): 15, 78  
 FAN.CNT 2  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 -----  
 PI US 5300281 A 19940405 US 1992-906998 19920701 <--  
 US 5137709 A 19920811 US 1991-656397 19910215 <--  
 PRAI US 1991-656397 A2 19910215 <--  
 CLASS  
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES  
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 US 5300281 ICM A61K043-00  
 ICS A61M036-14; A61N005-00  
 NCL 424001290

AB Radioactive compns. containing a calcific matrix and methods for using the compns. for therapeutic radiation treatment including rheumatoid arthritis are disclosed. A layered mixed metal hydroxide (LMMH) was prepared from MgCl<sub>2</sub>, AlCl<sub>3</sub>, and NH<sub>4</sub>OH. The LMMH was added to a hydroxylapatite/153Sm mixture and the mixture was allowed to sit for 10 min before injection into the synovium of a rabbit. No leakage of radioactivity from the synovium was observed  
 ST radiolabel calcific matrix rheumatoid arthritis treatment; samarium radiolabel hydroxylapatite synovium target  
 IT Radioelements, biological studies  
 RL: BIOL (Biological study)  
 (calcific matrix with sorbed, for radiation ablation treatment of rheumatoid arthritis)  
 IT Lime (chemical)  
 RL: BIOL (Biological study)  
 (calcific matrix, radionuclide sorbed on, for radiation ablation treatment of rheumatoid arthritis)  
 IT Radiotherapy  
 (of rheumatoid arthritis, by ablation with radiolabeled calcific matrix)  
 IT Hydroxides  
 RL: BIOL (Biological study)  
 (radiolabeled calcific matrix containing, for radiation ablation treatment of rheumatoid arthritis)  
 IT Synovial membrane  
 (radiolabeled calcific matrix targeting, for radiation ablation treatment of rheumatoid arthritis)  
 IT Coordination compounds  
 RL: BIOL (Biological study)  
 (chelates, radiolabeled calcific matrix containing, for radiation ablation treatment of rheumatoid arthritis)  
 IT Radioelements, biological studies  
 RL: BIOL (Biological study)  
 (complexes, with chelator, calcific matrix containing, for radiation ablation treatment of rheumatoid arthritis)  
 IT 1429-50-1D, Ethylenediaminetetramethylenephosphonic acid, radionuclide complexes 1984-15-2D, Methylenediphosphonic acid, radionuclide complexes 2809-21-4D, Hydroxyethanediphosphonic acid, radionuclide complexes 15468-10-7D, Hydroxymethylenediphosphonic

acid, radionuclide complexes 36465-90-4D, Diphosphonic acid, complexes with radionuclide 91987-74-5D, radionuclide complexes  
 RL: BIOL (Biological study)  
 (calcific matrix containing, for radiation ablation treatment of rheumatoid arthritis)

IT 10098-91-6, Yttrium-90, biological studies 13967-65-2, Holmium-166, biological studies 13981-28-7, Lanthanum-140, biological studies 14041-42-0, Gadolinium-159, biological studies 14041-44-2, Ytterbium-175, biological studies 14265-75-9, Lutetium-177, biological studies 14378-26-8, Rhenium-188, biological studies 14391-96-9, Scandium-47, biological studies 14998-63-1, Rhenium-186, biological studies 15766-00-4, Samarium-153, biological studies  
 RL: BIOL (Biological study)  
 (calcific matrix with sorbed, for radiation ablation treatment of rheumatoid arthritis)

IT 1306-06-5D, Hydroxylapatite, radiolabeled  
 RL: BIOL (Biological study)  
 (for rheumatoid arthritis radiation ablation treatment)

IT 14191-71-0, Indium-115, biological studies  
 RL: BIOL (Biological study)  
 (metastable, calcific matrix with sorbed, for radiation ablation treatment of rheumatoid arthritis)

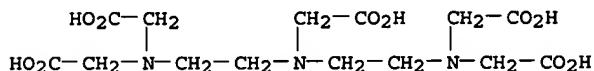
IT 106804-36-8P, Aluminum magnesium chloride hydroxide (AlMgClO<sub>3</sub>(OH)<sub>4</sub>.7)  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as layered mixed metal hydroxide, radiolabeled composition containing hydroxylapatite and, for radiation ablation treatment of rheumatoid arthritis)

IT 1336-21-6, Ammonium hydroxide 7786-30-3, Magnesium chloride, reactions 12125-02-9, Ammonium chloride, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of layered mixed metal hydroxide)

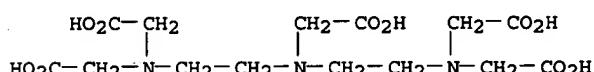
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L80 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 IT 67-43-6, Diethylenetriamine pentaacetic acid 67-43-6D, Diethylenetriamine pentaacetic acid, salts 15827-60-8 15827-60-8D, salts  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (chelating agent; regeneration of spent supported metal catalysts)

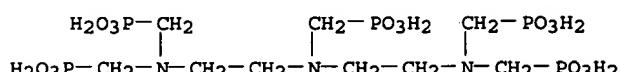
RN 67-43-6 HCAPLUS  
 CN Glycine, N,N-bis[2- [bis(carboxymethyl)amino]ethyl] - (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 67-43-6 HCAPLUS  
 CN Glycine, N,N-bis[2- [bis(carboxymethyl)amino]ethyl] - (7CI, 8CI, 9CI) (CA INDEX NAME)

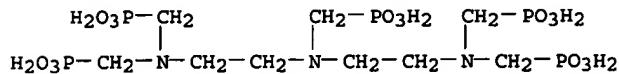


RN 15827-60-8 HCAPLUS  
 CN Phosphonic acid, [(phosphonomethyl)imino]bis[2,1-ethanediylnitrilobis(methylene)]tetrakis- (9CI) (CA INDEX NAME)

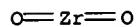


RN 15827-60-8 HCAPLUS  
 CN Phosphonic acid, [(phosphonomethyl)imino]bis[2,1-

ethanediylnitrilobis(methylene)]tetrakis- (9CI) (CA INDEX NAME)



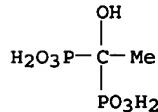
IT 1314-23-4, Zirconia, uses 7429-90-5, Aluminum,  
uses  
RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering  
or chemical process); PRP (Properties); PROC (Process); USES (Uses)  
(regeneration of spent supported metal catalysts)  
RN 1314-23-4 HCAPLUS  
CN Zirconium oxide (ZrO<sub>2</sub>) (8CI, 9CI) (CA INDEX NAME)



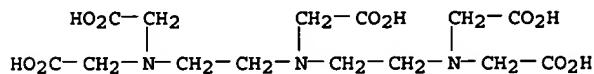
RN 7429-90-5 HCAPLUS  
CN Aluminum (8CI, 9CI) (CA INDEX NAME)

Al

L80 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
IT 2809-21-4  
RL: PEP (Physical, engineering or chemical process); PYP (Physical  
process); PROC (Process)  
(scale inhibitor; method for processing returns from oil and gas wells  
that have been treated with introduced fluids)  
RN 2809-21-4 HCAPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L80 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
IT 67-43-6DP, DTPA, reaction with polylysine, complexes  
with gadolinium, conjugates with serum albumin  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(polychelants for radiotherapy and diagnostic imaging)  
RN 67-43-6 HCAPLUS  
CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]- (7CI, 8CI, 9CI) (CA  
INDEX NAME)



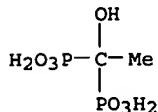
IT 7440-67-7D, Zirconium element, complexes with  
polychelates, conjugates with biomols.  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polychelants for radiotherapy and diagnostic imaging)  
RN 7440-67-7 HCAPLUS  
CN Zirconium (8CI, 9CI) (CA INDEX NAME)

Zr

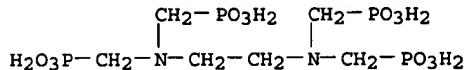
L80 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
IT 2809-21-4, EHDP

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(calcification-resistant materials and preparation using multivalent cations)

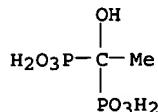
RN 2809-21-4 HCPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



L80 ANSWER 5 OF 5 HCPLUS COPYRIGHT 2004 ACS on STN  
IT 1429-50-1D, Ethylenediaminetetramethylenephosphonic acid, radionuclide complexes 2809-21-4D, Hydroxyethanediphosphonic acid, radionuclide complexes  
RL: BIOL (Biological study)  
(calcific matrix containing, for radiation ablation treatment of rheumatoid arthritis)  
RN 1429-50-1 HCPLUS  
CN Phosphonic acid, [1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis- (9CI) (CA INDEX NAME)



RN 2809-21-4 HCPLUS  
CN Phosphonic acid, (1-hydroxyethylidene)bis- (9CI) (CA INDEX NAME)



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